Aspects of tonal coherence in the motets of Josquin.

Judd, Dana Cristle Collins

ASPECTS OF TONAL COHERENCE IN THE MOTETS OF JOSQUIN

Volume I

A thesis submitted for the degree of

PhD

University of London

by

Dana Cristle Collins Judd

King's College

1993

ABSTRACT

ASPECTS OF TONAL COHERENCE IN THE MOTETS OF JOSQUIN

This thesis presents analyses of motets attributed to Josquin des Prez and offers a model for exploring tonal coherence in sacred vocal polyphony from about 1500. It also addresses aspects of genre, function, style, relationship of theory to practice, geographic influence, source dissemination, and attribution in this repertory. The analyses suggest a re-evaluation of Josquin's motet *oeuvre*; the theoretical perspective is eclectic, uniting analytic and contextual-historical observations. Chapters 1 to 3 develop a modern theoretical framework which relies on principles articulated by Renaissance theorists. Theoretical statements, especially about 'mode', the sub-texts created by musical examples and citations, and compositional determinants of pitch structure (text form and expression, formal organization, use of pre-existing material, and so forth) are considered along with the practicalities of a musical tradition rooted in plainchant, hexachordal manipulation of the gamut, and counterpoint. The theory proposed here provides a designation for, and identifies the markers of three main tonal categories, described by hexachordal nomenclature as *Ut*, *Re*, and *Mi* tonalities. Each consists of, and is defined by, a distinct collection of 'modal types', melodic-contrapuntal paradigms identifiable in a variety of structural guises. Chapters 4 to 6 explore *Ut / Re / Mi* tonalities in Josquin's motets in detail. Chapter 7 concentrates on the gospel motets and illustrates the maintenance of characteristics of the gospel tone, creating tonal profiles unique to this sub-genre of motet and suggestive of 'chant-based' tonality. Chapter 8 treats psalms and other motets first appearing in late German sources, identifying 'imitations' of securely attributed Josquin motets and considering questions of authorship in this group of

motets. The final chapter summarizes the most important observations about *Ut / Re / Mi* tonality and Josquin's motet style, and suggests directions for future research on the question of tonal coherence in music from about 1500.

CONTENTS

VOLUME 1

VOLUME 2

TABLES

FIGURES

ACKNOWLEDGEMENTS

During the research and writing of this thesis, I received much assistance which I now gratefully acknowledge. Financial support was provided by a King's College London Tutorial Studentship, a University of London Postgraduate Studentship, and an award from the UK Overseas Research Students Scheme. The Faculty of Music, University of Melbourne, provided assistance through travel grants.

Friends and colleagues at King's College London, the University of Melbourne, the University of Exeter, and California State University-Fresno provided forums for airing portions of this work as it progressed. Many scholars generously shared unpublished material and typescripts of work in press, read early versions of portions of this thesis, or responded to queries: Ellen Beebe, Jennifer Bloxam, Geoffrey Chew, David Fallows, Honey Meconi, Patrick Macey, Bernhard Meier, Leeman Perkins, Joshua Rifkin, Richard Sherr, and Peter Urquhart. I am especially grateful to Professors Harold S. Powers, Jessie Ann Owens, and Anthony M. Cummings for their unflagging encouragement and incisive advice on matters musical, theoretical, and practical. They have each profoundly influenced the direction my research has taken; I alone am responsible for the shortcomings that remain. Mark Everist graciously facilitated the final production of this thesis. I am deeply indebted to Professor Arnold Whittall who supervised this work from its inception and patiently trusted in its eventual completion.

Most of all, I would like to acknowledge the assistance of my husband, Robert Judd, at every stage of this work. He shouldered the impossible burden of being simultaneously keenest critic and staunchest ally, accomplishing the task with unequalled perspicacity and good humour.

PREFATORY NOTES

Music examples are referred to by number in the text of Volume 1 and may be found in Volume 2.

Citations of manuscripts and prints follow the sigla of the *Census-Catalogue of Manuscript Sources of Polyphonic Music 1400-1550*, *RISM Einzeldrucke vor 1800*, and *RISM Recueils imprimés, XVIe-XVIIe siècles*. Full citations are given in the bibliography. References to secondary literature and theory treatises use an author-date citation format. In the case of translations, all page references are to the translated text, unless otherwise indicated. Such a reference to a translation is shown with a reference to the author and a double date: that of the original publication, followed by the date of the translation (e.g., Dahlhaus 1968/1990). References to modern music editions are given by editor, short title, and number (e.g. Picker, *Antico*, 31). The exception to this practice are references to Albert Smijers, ed., *Werken van Josquin Desprez*, which are given simply as *Werken*, followed by the composition number. Though I have tried to include complete examples wherever possible, this thesis should be read with Josquin's motets at hand. Appendix 4 provides a list of motets discussed, noting their placement in the *Werken*, projected placement in the *New Josquin Edition*, and music examples in this thesis. For convenience, note values are always referred to as they occur in the modern edition.[1] Similarly, reference is made to bars and bar numbers of modern editions. Regardless of the nomenclature of the sources, voices are labeled uniformly as *superius*, *altus*, *tenor*, and *bassus*. Additional voices are labeled in relation to these (i.e., *tenor*

[1]This involves some inconsistency, since the editorial principles of the *Werken* changed, but will be the most convenient for a reader who wishes to compare the graphs and commentaries with an edition.

primus, *tenor secundus*) or as in the sources: *quinta vox*, *sexta vox*, etc. Upper case letters are used for generic pitch references. References to specific pitches are either indicated as part of the Guidonian gamut (e.g. *E la mi*) or with Helmholtz notation (e.g., d^2).

CHAPTER 1

INTRODUCTION

Background

The research for this thesis began as an analytical study of the motets attributed to Josquin des Prez, but it became clear in the course of writing that the only way to present the most important results of this study was to focus on the topic of 'tonal coherence', which loomed as the largest and most pertinent analytical issue, and the one that had proved most problematic in previous analytical discussion of this repertory. As my title ('*Aspects* of Tonal Coherence...') and chapter titles (e.g.,'...*Toward* a theory of Tonal Coherence...') suggest, this thesis makes no pretense of supplying a 'complete' overview of Josquin's motet *oeuvre*. What I offer here is a model for exploring the nature of tonal coherence in sacred vocal polyphony of the Josquin generation. By extension, I also wish to suggest a way 'Renaissance tonalities' may be approached. I do not mean to imply by my concentration on tonal coherence that features of these works such as text structure and form, pre-existing material and scaffolding devices, liturgical or para-liturgical associations, etc. which I do not address directly are undeserving of analytical treatment, and, these considerations do enter the discussion frequently, albeit in the context of how they impinge on tonal structure. I have published elsewhere 'model' analyses of individual works (Judd 1985 and 1992a) which illustrate the way I think such elements might be integrated in analysis. My purpose here is broader and more theoretically-oriented.

The original choice of Josquin's motets as a focus of study was reinforced by, and to a certain extent perpetuates, a phenomenon that Jessie Ann Owens recently

described as the 'Josquin myth' (Owens 1992): a(n exaggerated) view of the composer's pre-eminence that resulted from a confluence of the advent of music printing, a new attitude to the past reflected in Glarean's view of Josquin as 'classic', and the views of early music historians like Ambros. The apotheosis of his music in the 'canon' and assessments of Josquin in the 'great man' approach to history have conditioned the reception of his music. Howard Mayer Brown's assessment typifies this view:

> In many ways [Josquin's] greatness and individuality are displayed more clearly in his motets than in the other genres. Unhampered by the unchanging words of the Mass Ordinary and thus free to choose the texts that most stimulated his imagination, Josquin could display in his motets his boldest compositional inventiveness and sustain a level of expressive intensity altogether new in the history of music. (1976:122)

Hand in hand with such an assessment of Josquin's pre-eminence is a view of the years about 1500 as a 'watershed in the history of music' in which composers displayed 'a new awareness ... of harmonic possibilities and of the organizing force of tonality' (Brown 1976:117-8).

An exploration of these fundamental assumptions—the motet as a genre in which Josquin, the pre-eminent composer of his generation, displayed his 'greatness', and the 'organizing force of tonality'—is central to this thesis. This corpus of motets offers a large and varied group of compositions unified by their attribution to a single composer cited by contemporary and later theorists. Study of this corpus raises fundamental questions of genre, function, style, relationship of theory and practice, geographic influence, source dissemination, and attribution and authenticity, as well as issues of appropriate analytic method. It has become increasingly common to remove works from the Josquin canon by adjudging them 'stylistically dubious' (although it is much less common to assign anonymous works to the composer in the

same manner, unlike the rapidly expanding Busnoys *oeuvre*), but rarely have the criteria for such stylistic evaluations been explicitly defined.[1] The analyses presented in this thesis suggest a way forward to a re-evaluation of Josquin's motet *oeuvre* and aspects of his musical style. More importantly, the work undertaken here redresses a phenomenon which Joseph Kerman described: the tendency for early-music studies to be consciously deflected from consideration of the music itself (1985:119). The *New Josquin Edition*, long promised, has to date published only one volume of chansons. The critical perspective this thesis presents complements the work being done for that edition, drawing on the socio-historical and source-critical work that it has engendered, while focusing on musical issues.

Scope of Study: Motets attributed to Josquin

Following Cummings (1981), certain works published in the motet volumes of the *Werken* have been omitted from this study or accorded only the briefest mention on the basis of clear functional associations and a correspondingly different style: the hymns, *Magnificats*, and *Nunc dimittis*.[2] Similarly, a group of works published in the *Werken*, but whose authenticity has long been questioned, are not considered here.[3] As Cummings has shown, the motet is a genre best described as 'para-liturgical': the works were based on a sacred but not necessarily liturgical Latin text. The question of the motet's use or function is separate, and Cummings has

---

[1]See, for example the works list in Noble (1984). See also Rifkin (1991). I am grateful to Mr. Rifkin for a pre-publication copy of this article.

[2]This relatively small amount of service music in Josquin's output is plagued with questions of authenticity. See Noble(1984) on *Ave maris stella*; on the *Magnificats*, see Lagas (1965) and Maas (1965); and on *Nunc dimittis*, see Macey (1992).

[3]Most notably Osthoff's 'Satzfehler' motets (1965:I,19 and II,28) following the conclusions of Sparks (1976).

suggested that a looser relationship to the liturgy (i.e., the texts were not serving a specific liturgical function even when motets were performed in the context of the Mass) resulted in the distinctive musical characteristics of the genre.[4] I have adhered to a fairly broad definition of motet here, following the sources, which include many liturgical texts which may or may not have functioned in a liturgical context,[5] but fewer works than published in the *Werken* or generally ascribed to Josquin are discussed here.

Overview

I have adopted a pragmatic and eclectic theoretical position in this thesis. I have tried in so far as it has been possible to apply sixteenth-century theoretical terminology as its theorists would have understood it, rather than extend the meaning of those terms to areas for which their writers never intended them. Similarly, I have tried to avoid 'loaded' terminology and symbols from later theoretical discourse, for example using triadic nomenclature, or referring to 'V-I' cadences, or using various Schenkerian indicators. The debate of limited insight from restricted terminology versus 'anachronistic' analyses is unlikely to be settled anytime soon.[6] At times the alternative presented here may seem cumbersome, but the ultimate re-evaluation of

---

[4]I am grateful to Professor Cummings for sharing with me a pre-publication version of his chapter 'The Motet' (forthcoming in the *New Oxford History of Music*) and for stimulating discussions on the subject.

[5]For example, Snow (1983:266) says of *Liber generationis*: '[I]t should be noted that the opening item of [*ToleF 23*], Josquin's *Liber generationis*, is not a motet; rather, it is a setting of the genealogy of Christ as presented by Saint Matthew at the beginning of his Gospel'. Clearly Snow's view was not shared by Petrucci, who included *Liber generationis* in his motet anthology of 1504 (*RISM 1504/1*), one of the earliest sources of the motet.

[6]For extremes, and various positions in between in studies which set the tone of the debate, see for example Lowinsky (1962), Brown (1967), Dahlhaus (1968/1990), Aldrich (1969), Randel (1971), Nutting (1974a), and Meier (1974/1988).

certain commonly held tenets it allows is useful. My goal in this approach is to step outside the 'authentic / anachronistic' debate so frequently represented as a 'modal / tonal' opposition.

Chapter 2 illustrates my approach to the writings of an individual theorist, an historicist approach which might be considered analogous to an editorial method which relies on a single source. Rather than conflating statements from Aron's *Trattato della natura e cognizione di tutti gli tuoni di canto figurato* (1525) with those from other theorists on mode in attempting to come to some generalized reading of modal theory, I consider Aron here as a witness who gives a clear picture of one theorist's biases, interpretation, and insights, and whose writings are placed in a broader theoretical context. A reading of Aron's treatise which attempts to understand in his terms the basis of his classification of the polyphony he cites, refutes traditional assumptions about the relationship of mode and polyphony usually ascribed to this treatise. Following Aron's procedures to classify Josquin's motets is an exercise which reinforces the impression of a head-on collision between traditional modal theory and polyphonic practice in the early sixteenth century. It is also an exercise which raises questions of 'compositional' consideration of mode. Contrasts with later and modern interpretations of mode are pointed out in the course of this examination.

Many writers have recognized in this repertory a phenomenon variously described as 'tonal coherence', 'tonal focus', 'incipient tonality', and so forth, as Brown's words cited above indicated. The trend of late fifteenth and early sixteenth century theorists to associate mode with polyphonic composition (however successful or otherwise) also suggests that they recognized the tonal organization of polyphony. However unsatisfactory its application might be in the early part of the sixteenth century, mode was the only available theoretical construct for describing and

discussing pitch organization over any span of time. Contrapuntal theory dealt with consonances and polyphony, but in essence, only with short and restricted successions of intervals, with little indication of how those intervals were directed.

I have chosen to use the designation 'tonal coherence' because of the implications of the word 'coherence': an implication of parts which are connected by 'tonal' means. That is not to suggest that other areas do not contribute to coherence, most notably text, formal conventions, and liturgical associations, but rather that I am primarily interested here in purely musical connections (or lack thereof)—musical connections that remain even when extra-musical connections are removed or absent. Part of the study of tonal coherence in this repertory involves the formation of musical units: the way in which discrete units are created, and the manner in which they are connected. 'Coherence' inevitably carries with it value-laden connotations, but they are connotations which are not inappropriate in this context.

The more fundamental terms 'tonal' and 'tonality' are used here to designate pitch organization based on a *vox* of the Guidonian hexachord (identified secondarily by pitch class [*littera*]) which functions as a tonal centre on which the motion of other diatonically adjacent pitches is focused and which is reinforced by a hierarchical scheme of pitch relationships.[7] Contrapuntal pitch patterns which define tonality are described as 'modal types'. As Powers (1989:186) pointed out, this type of study is interpretative and related to concrete analysis, as opposed to the abstract

---

[7]This definition is similar to that of 'tonal focus' advanced by Powers (1989:185), but more specifically defined. Powers described 'tonal focus' thus:

> By "tonal focus" I mean either and both of two things: a cluster of diatonically adjacent pitch classes of the order of three to six, within which one or two predominate; a tonal center around which pitches and pitch relationships cluster or seem to be dominated. In medieval / Renaissance theoretical terms, tonal focus would be either a diatonic species of the fourth or fifth, or a degree in a Guidonian hexachord.

and empirically definable 'tonal types', or any such similar classification. The use of the word tonality here is in a general sense which harks back to the relativistic view of tonality held by Fétis, and not the much narrower definition of 'harmonic' tonality stemming from Riemann.

Chapter 3 sets out the theoretical basis for the study of tonal coherence in this repertory, pointing to the more practical (as opposed to 'learned' theoretical) tenets which underlie the tonalities of Josquin's motets. These include elements that were essentially distinct in the minds of fifteenth and sixteenth-century theorists, but that were intimately related in polyphonic composition: the hexachordal position and pitch of the final; characteristic melodic patterns associated with that final, particularly evident in the superius; contrapuntal procedures; and the registral constraints of a vocal ensemble. Consideration of these elements leads to a theory of three basic tonalities, identified here by hexachordal nomenclature as *Ut*, *Re*, and *Mi* tonalities. The discussion of counterpoint raises the related question of cadence and the role of cadential patterns in determining tonality. A review of theoretical evidence, again relying primarily on the formulations of Aron (*Libri Tres de Institutione Harmonica* [1516] and *Toscanello* [1523]) and modern analytical evidence is used to suggest a means of cadential analysis; Appendices 2 and 3 provide tables of the cadential profiles of each motet discussed in this thesis.

Each of the tonalities consists of, and is defined by, a distinct collection of 'modal types', melodic-contrapuntal paradigms of tonal coherence. The identification of modal types, analytical representation of them, and examples of the varieties of ways in which they contribute to tonal coherence conclude Chapter 3. Chapters 4 to 6 examine in detail the conventions of each tonality.

A picture of Josquin's associations of certain types of text with particular tonal configurations and compositional techniques becomes clear by examining works in

these tonal categories in conjunction with text type and source distribution. These conclusions allow a much closer evaluation of the relationship of motets first appearing in late prints with the securely attributed Josquin *oeuvre* than has been previously possible. Additionally, questions of the relationship of chant-based conventions and *Ut , Re, Mi* tonality are explored, showing the composer's manipulation of pre-existing material, his observations of tonal conventions associated with it, and relationships to pre-existing material which have gone previously unrecognized. Particularly important is Josquin's treatment of psalm texts and his use of 'resonances' of psalmody to connect these works to their plainchant tradition without necessarily literally quoting a psalm tone.

Chapter 7 explores the significance of such resonances and the relationship of reciting tones in Josquin's setting of gospel texts. The pervasive nature of the chant 'resonances' in this sub-genre of motet results in 'chant-based' tonality, a polyphonic tonality which relies on the conventions of a chant model—in this case the gospel reciting tone—without being a simple 'functional' harmonization of that tone. Examination of this group of motets and their sources informs an understanding of the increasing sixteenth-century tradition of setting gospel texts, and offers insight into questions of chronology and authenticity.

Chapter 8 considers a group of (primarily psalm) motets first appearing in 'late' German sources which are surrounded with questions of attribution and chronology. Nowacki (1979) remains the most extensive study of Latin-texted psalm motets, but only cites works appearing prior to 1535. Recent studies by Macey (1985, 1991a, 1991b, 1992)[8] have begun to clarify the context of some of the psalm

---

[8]I am grateful to Professor Macey for sharing a typescript of his 1992 article with me, and for sharing unpublished findings with me in numerous conversations.

settings which appeared in earlier sources and raised further doubts about several motets which make first appearances in later German sources, suggesting convincingly that these were modeled by 'Kleinmeister' on authentic, well-known, and widely-circulated Josquin motets. Some of Macey's findings are independently corroborated by conclusions presented here. Treating this group of works in a separate chapter, rather than with the tonality in which they would be classed, allows a more thorough examination and comparison of this group of works. Ultimately, conclusions about the authorship of these works must await further research into the use and market for such psalm settings and the Nürnberg printers responsible for the anthologies in which they first appeared.[9] However, the conclusions reached in Chapters 4 to 7 about Josquin's treatment of texts associated with reciting tones, his association of certain text-types and particular tonal configurations, and conventions of cleffing and signature, allow preliminary suggestions about the likely authorship of these motets and the markedly different approach to tonal closure in (presumably) German motets that may date from the 1520s and later.

The final chapter summarizes the most important general observations presented here about Josquin's motet style, explores the applicability of the analytical method suggested here to composers other than Josquin and genres other than the motet, and suggests directions for future research on the question of tonal coherence in music from about 1500.

---

[9]For example Susan Jackson's forthcoming dissertation: 'Music Printing in Sixteenth-Century Nürnberg: Berg and Neuber' (City University of New York).

CHAPTER 2

MODE IN POLYPHONY: THEORETICAL PERSPECTIVE

Modal theory was the single area concerned with melodic (and thus implicitly tonal) organization available to a theorist of the late fifteenth or early sixteenth century. Modal theory had long served as a means of classifying and rationalizing monophonic practice and was discussed near the beginning of a treatise, with the elements of music. Polyphony was dealt with later in a treatise under the headings of counterpoint and mensural theory. The increasing tendency of theorists to suggest the relevance of modes for polyphony culminated in the German theory of *musica poetica* in the second half of the sixteenth century—a fully fledged integration of traditional modal theory and contrapuntal instruction.[1] That integration was some eighty years in the making, and not surprisingly, early attempts to relate an *a priori* theory of mode to an on-going polyphonic compositional practice were problematic. The suggestion that modal theory was a compositional premise of the Josquin generation and that it offers insights for analysis of the works of these composers requires a careful evaluation. Specifically, four aspects of mode as it relates to polyphony merit consideration here: the theoretical tradition which incorporated references to polyphony in discussions of modal theory, *c.* 1475 - 1525; the implications of the examples these theorists cite for understanding their explicit

[1]Dressler (1563) is the best example of such a treatise. See Powers (1980:397-404) and Meier (1974/1988).

statements; evidence of practical consideration of mode as a compositional premise; and modern attempts to use mode as an element of analysis.

Theoretical sources which connect mode with polyphony date from the 1470s and 1480s,[2] while the first indisputable evidence of compositional (or editorial) concern with 'modal presentation' dates from the 1530s at the earliest.[3] Modern use of mode in an analytical context has a long and controversial history.[4] In this chapter, following to a certain extent the lead of Powers (1991), I wish to shift the emphasis of the debate which has surrounded mode and polyphony. Ultimately, I wish to suggest in the next chapter that the way forward lies in the more basic practical framework shared by modal theory and polyphonic composition: the Guidonian diatonic as expressed through the system of overlapping hexachords. It is important, though, to understand what modal theory was (and was not) with reference

---

[2]For example, Tinctoris (1476) and Burtius (1487).

[3]See Brown (1990) and Powers (1981) among others for discussions of modally ordered collections and evidence of compositional representation of mode. Meier (1974/1988) discusses compositional use of mode as an affective and structural pre-determinant. Krantz (1983 and 1989) extend Meier's approach to the music of the Josquin generation, arguing for compositional 'modal presentation'. Behind Krantz's work lies the premise that theory lagged behind practice and that theorists of following generations (e.g. Glarean) and the evidence of later intabulations reflect the compositional process of the Josquin generation. As will be shown below, the thesis of 'modal presentation' in the motets of Josquin is problematic, lacking both musical and theoretical support. Powers (1988) showed that the relationship of theory and practice in the instance of modal theory and polyphony is more complicated than previously supposed. He suggested a scenario beginning with the adaptation of monophonic theory to fit extant polyphony, followed in the next generation (i.e., that of Josquin) by a clash of theory and practice, which was finally resolved (as witnessed by ordered modal collections) with an apparent adaptation of practice to theory. The application of Aron's theory to the motets of Josquin presented below reflects the 'clash' of theory and practice Powers suggested. Another avenue of modal studies is typified by Perkins (1973) and countered by Urquhart (1982). The discussion of Aron (1525) in this chapter points to the difficulties of Perkins' applications.

[4]No good purpose would be served by repeating the entire mode and polyphony debate here. Beebe (1976:95-107) summarized the currents of the debate and several recent conferences have aired the central arguments, most notably the session on 'Mode and Polyphony' at the Conference on Medieval and Renaissance Music (King's College London, August 1986) and the Princeton University Colloquium 'Tonal Coherence in Pre-Tonal Polyphony' (April 1987). Papers from these conferences include Owens (1990), Haar (1989), Perkins (1987b), Powers (1991), and Meier (1986).

to Josquin's motets. In particular, I will concentrate on the theoretical tradition that led to the *Trattato della natura e cognizione di tutti gli tuoni di canto figurato* (1525) of Pietro Aron as the basis of a study of modal theory around 1500. A brief examination of the modal theory of Tinctoris, Burtius, Cochlaeus, and Gaffurius is used to define terminology and place Aron's writing in context. Aron's treatise is set apart by its citations of polyphonic examples, including several motets by Josquin, and the very title of this treatise would seem to suggest its centrality to discussions of mode and polyphony. The relation of Aron's theory to polyphony is viewed by means of a two-pronged study which evaluates the basis on which Aron made his modal categorizations by examining the music he cites, and examines Josquin's motets by the same criteria on which Aron made those assignments. What emerges from this reading of Aron's theory is the sense of an individual voice asking and answering very different questions to those for which he is often credited (and just as often faulted). His approach to tonal coherence is so dramatically different from one which we might take that it may seem an exercise in futility to go on, as I do, to a hypothetical categorization of Josquin's motets following Aron's precepts. Such a categorization is ultimately useful, however, suggesting both the problems inherent in viewing this repertory as 'modal' polyphony and also hinting at groupings of works that will be further explored in the following chapters. A study of a single motet by Josquin, *Miserere mei Deus*, cited by both Aron and Glarean, contrasts Aron's treatise with the Swiss-German tradition which culminated in Glarean (1547). The impetus behind Glarean's formulations is markedly different from Aron's and their conflicting modal assignment offers insights into their contrasting perspectives. Saul Novack has also analysed this motet, and the comparison of these three views of a single work exemplifies the difficulties of approaching tonal coherence in this repertory from either a 'modal' or a 'tonal' perspective.

As Dahlhaus argued, the continuity of an unchanging set of terms like finalis, ambitus, and repercussa does not 'guarantee the identity of their meanings' (1968/1990:199). Some recent scholarship shows little awareness of Dahlhaus' caveat, however, with a marked tendency to distil seventy-five years of theory (Tinctoris to Zarlino) into a 'modal system' with little regard for reading individual theorists on their own terms. Such a tendency is marked by the loose intertwining of terminology from the eight and twelve mode systems; the general use of the nomenclature 'dorian', 'phrygian', and so forth, even though many theorists continued to denote mode by number and *maneria*; the blurred distinction of the authentic and plagal modes; the invocation of the 'repercussion' as a modal identifier, and so on—all of which suggests a continuity of theoretical tradition and interpretation not supported by the sources. As Powers and others have demonstrated, conventional assumptions about a modal / tonal dichotomy and a succession of 'modal to tonal' will not withstand close scrutiny.[5] While some sort of synthesis of Powers' and Hermelink's concept of tonal types as modal representations with Meier's approach to mode as compositional determinant surely sets the agenda for further studies of tonal coherence in the mid to late sixteenth century, the direction for studies of earlier repertories is less clear. To assume, as Krantz (1989) seems to, that composers of the Josquin generation composed 'in the modes' in the same sense that Rore and later composers did is to overlook the evidence of both the music and the theory. To reject sixteenth-century theory as uninformative for analysis underestimates the practical bases on which that theory was founded.

---

[5]See especially Powers (1991) on the problems of a modal/tonal opposition.

Tinctoris and the Theoretical Tradition

Lockwood (1984:241) proposed that since he was the nearest contemporary theorist to Josquin, Tinctoris should serve as the basis for an exploration of Josquin's music. Of Tinctoris' twelve treatises, two (Tinctoris [1476 and 1477]) broach the question of mode and polyphony. Tinctoris' writings have been studied extensively, but it will be useful to review here his terminology of modal theory as a basic foundation.

Terminology

Tinctoris (1476) sets forth most fully his teaching on mode which may be summarized under three basic headings: 1) the species; 2) finals and appropriate tones for beginnings and endings; and 3) range (*ambitus*), mixture and commixture.

The species. Tinctoris outlines the interval content (i.e., the order of tone and semitone) of three species of fourth and four species of fifth. The ways in which these are combined to produce a mode are summarized in Example 2.1, which is based on the examples of chapters 2-10. Tinctoris notes that Modes 5 and 6 are frequently modified by the introduction of B-flat, which transforms the species of fifth, and he supplies two contrapuntal examples which justify the alteration to avoid either a 'vertical' or 'horizontal' tritone. These counterpoints are reproduced in Example 2.2. It is noteworthy that Tinctoris used counterpoint to justify monophonic practice, the main subject of the treatise. Tinctoris is thus forced to suggest that the main practical difference between the modal pairs 5/6 and 7/8 is not the species of fifth, but rather the use of 'soft' or 'hard' B.

Finals; Appropriate Beginnings and Endings. Tinctoris recognizes the four conventional 'regular' finals which he defines as 'the place in which the last note of a tone occurs' (1476/1976:40): *D sol re*, *E la mi grave*, *F fa ut grave*, and *G sol re ut grave*, one to each pair of Modes. In addition, he catalogues the following 'irregular' finals:

Modes 1 and 2: *G sol re ut grave* (with B-flat)
C fa ut and *C* below (with B-flat and E-flat)
Modes 3 and 4: *A la mi re* (with B-flat)
D sol re and *D* below (with B-flat and E-flat)
Modes 5 and 6: *C fa ut* (with B-natural)
B fa / mi acute (with B-flat [and E-flat])
F below [*F fa ut*]
Modes 7 and 8: *F fa ut grave* and *F* below (with B-flat and E-flat)
C sol fa ut (with B-flat)

Three monophonic examples of each mode are given, and Tinctoris observes that others are available and includes further examples in chapter 50.

Tinctoris notes that a mode may begin at any point in its range, but that certain places are more common. With the exceptions of Modes 3 and 4, he cites the framing notes of the species (*not* the reciting tone), substituting A for the problematic B in Modes 3 and 4 without comment. He qualifies this list by observing that any chant can begin almost anywhere (as documented by graduals and antiphoners) and lists the possibilities, but argues nevertheless that 'there is scarcely one [composed song out of fifty] that does not begin on that place where it finishes' (1476/1976:20-1).

Ambitus; Mixture and Commixture. Tinctoris defines ambitus as the proper (or possible) ascent or descent (1476/1976:21). With regard to both, a mode may be

'perfect', 'imperfect', or 'more than perfect'. Tinctoris describes the combination of authentic and plagal modes as 'mixed', an idea which follows naturally from the discussion of range and those chants which exceed the 'perfect' range of the mode. By contrast, 'commixture' combines species of fifths and fourths in a manner other than the normal: commixture of an authentic mode is always with other than its plagal, of a plagal with other than its authentic. Commixture of one mode may be made with any other, while mixture occurs with only the corresponding authentic or plagal mode. Commixture is caused by the insertion of a 'foreign' species of fourth or fifth. In all cases, mixed or commixed modes are identified according to the concluding species of fourth or fifth and its placement relative to the final.

Mode and polyphony. Polyphony enters the discussion of mode in Tinctoris (1476) explicitly in only four instances:

> 1) He notes in the introduction that the modes are used not only for plainsong but also for polyphony (1476/1976:6);
>
> 2) Counterpoint is used to illustrate the necessity for a B-flat in Modes 5 and 6 to avoid tritones (1476.1976:10);
>
> 3) He observes that notes for beginnings are more restricted in polyphony, which usually finishes where it begins (1476/1976:20);
>
> 4) In discussing the identification of mixture and commixture, Tinctoris notes that the fundamental voice in a polyphonic composition is the tenor; the modes of individual parts will differ and are to be determined in the same way as a plainsong melody—that is, by species of fourth and fifth, and range (1476/1976:24-5).

In the context of this point Tinctoris refers to a specific piece of polyphony, Dufay's *Le Serviter*, as an example. He assigns the tenor to Mode 1 and the superius and contratenor to Mode 2.

Just as contrapuntal principles enter Tinctoris (1476) only in passing, so the discussion of modes in Tinctoris (1477) is minimal. The only mention is the oft-cited fifth rule from Book 3, supported by two examples, that is usually interpreted to mean that a cadence should not be foreign to the mode: 'above absolutely no note is taken a perfection by which the song can be removed from its mode' (1477/1961:135). But Tinctoris nowhere specifies what takes a composition out of its mode and whether a hierarchy of pitches within a mode exists. The lists for beginnings (and implicitly endings) given in Tinctoris (1476) provide only a basic starting point. His conscious effort to associate contrapuntal and modal theory in these two treatises is limited: if his statements are taken literally and read in context, they offer little insight regarding tonal coherence, despite Lockwood's hope.

* * *

Although to our way of thinking mode and counterpoint may be intimately related, it is abundantly clear that for the fifteenth-century theorist they occupied distinct intellectual terrain. For example, Gaffurius (1496), avoids even the minimal association of mode and counterpoint noted in Tinctoris (1476 and 1477). The modes are discussed in the traditional place, following the elements of music, in the first book. Gaffurius makes greater reference to Greek theory than Tinctoris, referring to the modes of antiquity and the octave species which he relates to the church modes. Well-versed in both classical and traditional medieval theory, Gaffurius makes no attempt to consider, even by analogy, melodic organization of polyphony. Likewise, Book 3 of Gaffurius (1496), 'The Art of Counterpoint', is a

compilation of accepted rules of counterpoint. Nowhere in the counterpoint treatise is mode mentioned.[6]

Reference to one more treatise, Burtius (1487), completes the context of the Italian tradition. Burtius is not unlike Tinctoris both in the placement and content of his discussion of mode (in the first book) and counterpoint (in the second book). But he does hint at practical concerns:

> Although antiphons with a narrow range are differentiated in the same natural way as other plainchant, since sometimes they can hardly be distinguished, they are treated here for the understanding of *practitioners, not of musicians*. The latter undoubtedly have complete knowledge of this subject. [emphasis added]

Burtius then goes on to give the hexachordal modal identifiers familiar from elementary singing treatises:

Mode 1: *re-la* [D-A]
Mode 2: *re-fa* [D-F]
Mode 3: *mi-fa* [E-C]
Mode 4: *mi-la* [E-A]
Mode 5: *fa-fa* [F-C]
Mode 6: *fa-la* [F-A]
Mode 7: *ut-sol* [G-D]
Mode 8: *ut-fa* [G-C]

His invocation of solmization reminders is also, no doubt, tied to the role of the treatise as a defense of the Guidonian system in response to the attacks of Ramos de Pareia. Mode does enter the discussion of Book 2, but for aesthetic rather than technical reasons. Burtius argues that the principles for composing polyphony are the

---

[6]There is no evidence to support Bergquist's assertion that Gaffurius shared Tinctoris' tendency to consider modes in relation to counterpoint (1964:259).

same as for composing plainchant with the added requirement of a knowledge of mensural notation, hence implying also knowledge of the modes which he stated earlier was necessary for the composition of plainchant. But knowledge of the modes is principally required for affective reasons, and Burtius outlines the affects of each mode (1487/1983:84). The more practical bent of this treatise is again exposed in his explicit description of how to compose polyphony which suggests a successive manner of composition.[7]

Cochlaeus and the Swiss / German tradition

Cochlaeus (1511) represents an expansion of earlier writings and relies heavily on the *Opus Aureum* of Wollick and Schanppecher and Gaffurius(1496). Unlike the treatises discussed thus far, it was written as a school textbook. That orientation is clear in the discussion of *melodia*:

> What is the *melodia* of a Tone? It is a normal progression of notes using a certain interval which is more common to one Tone than to another. From an understanding of *melodia* four notes result, which follow the four finals of Tones.
>
> 1. A song beginning on *d sol re* which frequently moves from *re* to high *la* and also rises to *fa* above *la* belongs to the first Tone. But if it is centered about *re* and frequently comes to *fa*, the third above, it belongs to the second Tone.
>
> 2. If a song originating on *e la mi* often reaches *la* [*recte* fa] a sixth above, it belongs to the third Tone. But if it moves more frequently from *mi* to *la* a fourth above, it belongs to the fourth Tone.

---

[7]See especially Burtius (1487/1983:84-7).

> 3. If a song beginning on *F fa ut* moves from *ut* up to *sol*, back to *mi*, and again returns to *sol*, it belongs to the fifth Tone. But if it moves more frequently between *fa* and *la* a third above, it belongs to the sixth Tone.
>
> 4. A song beginning on *G sol re ut* which often rises from *ut* to *sol* and reaches *la* above, belongs to the seventh Tone. But if *ut* rises to *fa* more often, and *fa* is reached by descending a fifth, the song belongs to the eighth Tone (1511/1970:49-50).

Cochlaeus gives examples of each mode and proceeds to a conclusion that extends the discussion of antiphons in Burtius (1487) and places the identification of mode in a different sphere:

> If the preceding discussion has been considered carefully, one can easily recognize the Tone to which a song belongs through *hearing alone, even if the notes have not been examined.* For this reason every one should observe the *melodia* with the greatest care, since an authentic Tone does not differ from its plagal in its final, or in the quality of a song, but in the *melodia* and ascent and descent (1511/1970:51) [emphasis added].

This topic becomes important for the Swiss-German theoretical tradition of modal theory and is reflected in Glarean's notion of *phrasis* and Dressler's discussion of the *repercussio* as an interval rather than simply a reciting note. Cochlaeus differs from the writers surveyed thus far in his more detailed examination of plainsong practice; he allots a chapter each to differentiae, psalmody, introits, responsories, other kinds of chants, and recitation tones, reflecting the elementary audience of his treatise. The fourth book examines mensural music and is important for the detailed discussion of cadence and a description of four-voice harmonizations of psalm tones, with examples given.

Pietro Aron, *Trattato della natura e cognizione di tutti gli tuoni di canto figurato*

Pietro Aron's first published treatise *Libri Tres de Institutione Harmonica* (1516) contains his most extensive explanation of modal theory in chant in Book 1, chapters 26-35.[8] In this conventional and conservative explanation, Aron follows in the Italian tradition which extended from Marchettus through Tinctoris and into the sixteenth century.[9] With this background, Aron's avowed purpose in the *Trattato* (1525) is nothing short of remarkable.[10] With a certain pride, Aron proposes to confront a problem that his theoretical colleagues had avoided.

> And knowing it to be exacting and strange, I judge that it was abandoned by the celebrated musicians already referred to not through ignorance but merely because it proved otherwise troublesome and exacting at the time. For it is clear that no writers of our age have explained how the many different modes are to be recognized, although to their greater credit they have treated of matters which can be readily understood.... I show briefly what I know to be necessary, for I see that many are deceived about the true understanding, and regarding this I hope in some measure to satisfy them. (1525/1950:206-7)

What actually sets Aron's treatise apart is not that he is going to show how the modes are recognized, but rather that he is going to do so with specific citations of polyphonic examples. Aron's priorities for adducing the mode of the examples he cites reflect a hierarchical interrelationship that proceeds from the mode of the tenor

---

[8]For a detailed summary of Aron's modal theory in *Institutione Harmonica*, see Bergquist (1964:224ff).

[9]Bergquist (1964:224ff) and Niemöller (1956).

[10]The publication of the treatise in Italian placed Aron outside the 'learned' tradition. See Blackburn (1991) for the most recent biographical study of Aron.

or a pre-existing plainsong to a consideration of final, species, and *differentiae*.[11] The tenor defines the mode unless a plainsong appears in another part which then takes modal priority;[12] the mode of a polyphonic composition is that of the pre-existent melody on which it is based. The final determines the mode in works with the regular finals D and E. The same is true of the regular finals F and G, although if contradicted by the species the possibility of irregular endings on the confinal or *differentiae* must be considered. The species govern irregular endings on the confinal or *differentiae*, or in works with a B-flat. Procedure, species, and *differentiae* govern irregular endings on A, B(flat), or C. The species and *differentiae* are used together to determine the mode of compositions that do not end on regular finals and that contain contradictory or incomplete species.

The first seven chapters of Aron (1525) set out these 'rules', and here Aron cites the music examples for which this treatise is often noted.[13] His categorization of polyphonic examples should be understood in the context of these chapters, not the entire treatise. Although Aron is often cited as the authority for an approach to

---

[11]The invocation of the *differentiae* as 'irregular' finals is the most unusual proposal of Aron (1525). Although he refers to the psalm tone *differentiae*, his wide-ranging discussion applies these psalm tone pseudo-finals to both sacred (non-psalm) and secular genres. Although a precedent for such procedures might be adduced from Burtius (1497), the use of the term *differentiae* there refers specifically to antiphons and possibly by analogy to other chants. Aron's extension to non-chant-based and secular works represents a significant departure from traditional modal theory.

[12]Dahlhaus (1968/1990:201-2) asserts that, for Aron, the tenor can no longer govern when there is no cantus firmus, voices are composed simultaneously, or the tenor ambitus is matched in the superius. This does not accord with the examples actually cited in Aron (1525), which clearly have been classified on the basis of the tenor. See also Meier's discussion of the theoretical basis of the 'tenor principle' (1974/1988:70-4).

[13]Powers (1991) illuminates many of Aron's difficult assignments. I am grateful to Professor Powers for a typescript of this paper and for on-going discussion of Aron's modal assignments.

modal categorization that relies on a hierarchy of cadential pitches within a modal scheme, the evidence of his own music citations does not support this view.[14]

While refining his procedures for identifying the modes, Aron expresses his misgivings at the prospect:

> [H]aving reached this point, I am left somewhat in doubt. Yet I intend rather to go on reasoning with you, seeking a rule by means of which you may arrive at a clear understanding of each of the tones in question (1525/1950:210).

These misgivings may be in part formulaic—Aron was in the habit of excusing himself, begging the reader's indulgence, and noting his own shortcomings—but they also project Aron's determination to find the 'rules' and the observance of those rules by which any piece of polyphony could be modally categorized.

An examination of the works Aron cites reveals a classification system which is consistent with the procedures outlined above. While some refinement is necessary as he proceeds, Aron is able to illustrate each modal classification with citations of composed polyphony. In spite of these frequent references to polyphony, however, Aron hardly goes further than his predecessors in his technical references to polyphony in the context of modal theory. When he does so, it is necessitated by his examples, as in his discussion of an extended final cadence:

> And if sometimes, as has become the custom, the composer prolongs his work, amusing himself with additional progressions, you will, in my opinion, need to consider whether the final, as altered by the composer, is suited to and in keeping or out of keeping with his composition, for if reason guide him in what is suited to the tone he

---

[14]See for example Perkins (1973) for a view which links cadential hierarchy and modal identification. I do not wish to suggest that a hierarchy of cadential pitches is irrelevant to discussions of tonal coherence in this repertory, but it was apparently unnecessary to Aron for his modal classification.

> will at least see to it that some one part (namely, the tenor or cantus) sustains the final, while the others proceed as required by the tone, regular or irregular, with pleasing and appropriate progression like those shown below, or in some more varied manner according to his pleasure and disposition (1525/1950:212).

Aron includes examples of such extensions for each final (see Example 2.3). The superius sustains the final and is joined by the bassus in the concluding sonority; the tenor finishes a third or fifth above the bassus. These examples illustrate the special relationship of superius with the mode-carrying tenor voice;[15] situations in which an extension to a final cadence causes the tenor to conclude on a pitch other than the final; the regular role the bassus plays in such counterpoint; and the 'filler' function of the altus.

Aron's music citations: a survey

Aron organizes his presentation by modal pairs, devoting one chapter to each *maneria* and substantiating each termination available to a mode by citing one or more polyphonic examples with minimal explanatory commentary. The significance of Aron's assignments was the attempt to demonstrate in a logical manner the relevance of traditional medieval modal theory for the music of his day. In his consistency of application, he offers us a model of the relationship between the two in the early sixteenth century. To our mind, that application may not work very well, but stretching and reinterpreting Aron's theory removes its theoretical integrity while raising a host of new problems.

---

[15]Aron notes elsewhere that the mode is more clearly established if the superius also concludes on the final.

I will illustrate his process of modal classification by a précis of his discussion of one modal pair, modes 1 and 2 (Aron [1525:chapter 4]). As an overview, these examples—one or more from each termination available to Modes 1 and 2—give a good sense of the way Aron applies the theory he has outlined in the opening chapters to classification and the way his logic proceeds, obviating the need to continue here example by example. Instead, a distillation of *topoi* encountered in the succeeding chapters follows. This survey conveys not only a sense of the repertory known and available to Aron, but also provides a point of departure for raising many of the issues related to mode (and tonal coherence) which will be elaborated further in the next chapter.

Aron refers to seventy-eight pieces of polyphony in the opening chapters of the *Trattato*. Of these, forty-two are chansons or other secular songs, taken almost entirely from the *Odhecaton* (*RISM 1501*) or *Canti B* (*RISM 1502/2*); thirty are motets, drawn primarily from Petrucci prints, especially the three volumes of *Motetti de la corona* (*RISM 1514/1, 1519/2,* and *1519/3*); and the remaining six are from Mass Ordinaries, presumably also from Petrucci prints (*RISM J1505, J1514*, and so forth). The distribution of examples by mode is as follows:

Mode 1: 13
Mode 2: 7
Mixed Modes 1 and 2: 5
Mode 3: 3
Mode 4: 1
Mode 5: 5
Mode 6: 10
Mode 7: 8
Mode 8: 12[16]

[16]This count does not equal the full number of Aron's citations because some works are cited without a clear modal ascription.

The number of examples given per mode reflects primarily the number of finals (regular and irregular), confinals, and *differentiae* available to a given mode and the more extensive discussion allotted to the first *maneria.*[17]

Modes 1 and 2

Final on *D sol re.*[18] Aron's choice of Mouton's *Congregati sunt gentes* (Picker, *Antico*, 277) is an unambiguous example of a Mode 1 classification. The final cadence uses the superius and tenor as structural voices,[19] closing to an octave on D, and the tenor outlines the species of fifth characteristic of Mode 1 (see Example 2.4). Likewise, the ending of the *prima pars* provides a classic illustration of Aron's mode-defining properties (see Example 2.5).

Aron needed look no further than the conclusion of the tenor of the motet for his categorization. In this straightforward example the modal clarity of the tenor is matched by the other voices of the polyphonic context.[20] Range, cadences, and melodic procedure are entirely in keeping with Aron's assignment. Ranges (and cleffing) suggest a straightforward distribution of the voice in the authentic and plagal pair of modes sharing D as final (see Example 2.6).

---

[17]Some obvious further directions for research include: why Aron chose the examples he cites; whether they reflect the order of the prints in a discernible fashion; which works from the prints do not merit mention in the *Trattato*; whether those works would be easily categorized by Aron's criteria; and whether Aron's distribution of modes suggests a statistical distribution mirrored in the repertory.

[18]Aron cites five motets: Jacotin *Rogamus te virgo Maria*; Caen *Judica me Deus*, Mouton *Congregati sunt* and *Beata Dei genitrix*, and Regis *Clanget plebs flores.*

[19]See Chapter 3 on cadential voicing.

[20]Indeed, among all of the examples cited by Aron, those by Mouton are the most straightforward for categorization from every perspective.

A plan of the 'strongest' cadences (those in which at least two voices participate, at least one of which has *cantizans* or *tenorizans* motion) and caesuras is equally 'conventional', as shown in Table 2.1.[21] The use of repeated material between the two parts of the motet results in a basic cadential scheme which characterizes the motet with the final D acting as a pillar in a parallel ordering of each *pars*: D (C) G D A D. The melodic motion of individual lines is confined for the most part to outlines expected in this modal context; anything that might be described as an 'excursion' is infrequent and limited. Even in the opening of the *secunda pars* (see Example 2.7), where species of fourth are emphasized through imitation at the fifth below, the modal priority is clear. Likewise, the *exordium* of the *prima pars*

---

[21]The association of Aron's treatise with cadence as a mode-defining property as in Perkins (1973) may well stem from Strunk's interpretation of Aron's use of the term *processo*, 'procedure':

> As Aron explains in Chapter 8, suitable and appropriate 'procedure' turns largely on the choice of proper steps for medial cadences. In Chapters 9 to 12 these are said to be as follows: for the first tone--D, F, G, and a; for the second--A, C, D, F, G, and a; for the third--E, F, G, A, b[natural], and c; for the fourth--C, D, E, F, G, and a; for the fifth--F, a, and c; for the sixth--C, D, F, A, and c; for the seventh--G, a, b[natural], c and d; for the eighth--D, F, G, and c. (1525/1950:208n4).

Cf. Powers' interpretation:

> Aron's listing of *processo* as a modal determinant, syntactically coordinate with species and psalm-tone pseudo-final, points toward his later use of *processo* as a modal criterion independent of species and psalm-tone pseudo-final. The noun *processo*, and the verb *procedere*, occur many times in the course of Aron's specific discussion; *processo* is cognate to the Latin *processus*, a term that appears from time to time in chant theory as a synonym for ambitus. Aron's usage throughout the treatise shows that he understood *processo* as ambitus, and that *procedere* means to move around in an ambitus, a given defined overall compass. In the late medieval Italian tradition of modal theory to which Aron belonged, the ambitus of a mode is normally understood as the composite of its 'proper' species of fifth and fourth in appropriately authentic or plagal disposition above or above and below the modal final. Aron, however, sometimes chose to use *processo* (the concept of ambitus) in its purely Guidonian sense, as the undivided span within which the melodic activity in a given mode is comprised. Within the span covered by a *processo* so understood, modally relevant species of the consonances could be distributed independently of the location of the terminating degree of the piece, and in any vertical disposition. (1991:36)

establishes the 'procedure' and 'proper form' of Mode 1 (see Example 2.8); when the tenor enters, it repeats the material of the superius: the species of fifth, followed by the species of fourth and the filling of the ambitus, divided by a cadence to the fifth and concluding with a cadence on D.

Table 2.1: Mouton, *Congregate sunt gentes*, Cadential profile[22]

Bar	Cadence tone	Type	Cantizans	Tenorizans	Basizans	Caesura	Structural voicing
(14)	A	F	S	(A)			
18	D	F	A	S			
32	D	F	S	T	B	(A)	*
51	G	F	S	A	B	T	
59	D	S		S	B		
64	A	F	S	T	B		*
(67)	A	S	T		B	S	
70	A	F	B	A			
77	D	F	S	T	B		*
15	D	F	A	S	T		
(24)	A	S	(S)	T		TS	
33	C	F	A	B			
37	G	F	S	A			
43	G	F	S	A	B		
51	D			S	B		
58	A	F	S	T	B		*
64	A	S	S	T	B		
69	D	F	S	T	B	A	*

Congregate sunt gentes (or at least its tenor) would be identified as Mode 1 by any of the theorists cited in this chapter and by methods of examination more closely associated with modern studies of mode (e.g., cadential tabulation and hierarchy). Were this the case with all of Aron's citations, it would be far less crucial to insist on such a literal reading of his text. That it is not, may be illustrated by another of his Mode 1 examples, the anonymous chanson *Pour quoy fu fait ceste*

[22]See Chapter 3 and Appendices 1 and 2 for a discussion of tables of cadential profiles, terminology, and structural cadences.

emprise, which has a B-flat signature. Aron remarks that the mode of the composition is unaltered by the flat signature because the species of fifth is left intact. The chanson is divided into two parts, each of which concludes on D (see Example 2.9), although the tenor concludes on F in the interior cadence. While there is some emphasis on the first species of fifth D-A—for example the opening point of imitation between tenor and superius (see Example 2.10)—there is also a strong emphasis on the first species of fourth, D-G, and numerous internal cadences to G, suggesting the possibility of Mode 1 with a G final. However, the close of each section on D and the species of fifth of the opening would not have allowed this possibility for Aron.

Table 2.2: Anon., *Pour quoy fu fait ceste emprise*, Cadential profile

Bar	Cadence tone	Type	Cantizans	Tenorizans	Basizans	Structural voicing
9	G	F	S	T	CT	*
12	G	F	T	CT		
16	G	S	S	T		
20	C	F	T	CT		
22	G	F	S	T	(CT)	*
24	D	F	T			
28	(D)	(F)	(CT)			
30	D	F	S	CT		
33	G	S	S	T	(CT)	*
38	(D)	caesura				
42	G	F	T	CT		
45	G	F	CT	S		
55	B^b	F	S	T	CT	*
69	A	F	S	T		
73	A	F	T	CT		
77	A	F	S	T		
80	G	F	T	CT		
83	G	F	S	(T)	CT	
87	D	F	S	T	CT	*

Bergquist, using criteria which are unclear but which seem to rely on scalar characteristics—Glarean's species of octave—identifies the mode of this composition as 'D aeolian'. He identifies the final as F, not D, and cites the interior rather than

final cadence of the chanson.[23] These observations obscure the role of the pitch G and cadence tones related to it in the chanson, as illustrated by the opening and further supported by a cadential tabulation. It is only the consideration of other aspects of the work, properly related to counterpoint (or in Bergquist's case a modern understanding of harmony and tonality) which bring the mode of the chanson into question.

Final on *D la sol re.* Aron also notes that the final may be displaced by an octave and cites several examples, with and without a flat signature. While on the surface this modal classification may seem obvious, in practice several difficulties are created by the octave shift of the final. If / when ranges of other voices are modified appropriately, a contrapuntal shape distinct from the lower modal form results.[24] All of the works Aron cites share a final on *d la sol re* and an obvious statement of the species of fifth preceding the final cadence in the tenor (see Example 2.11). Indeed, Japart's *Helas que il est a mon gre* is a straightforward example, as the annotations on the score in Example 2.12 show. As Aron notes, the higher final makes it unlikely for the tenor to use the full range.

In other examples, however, the further one moves from Aron's *basic* classificatory procedures, the more difficult the modal assignments become. For example, Josquin's altered *L'homme armé* tune (see Example 2.13) might appear to represent Mode 1 with a G final and flat signature, as the annotation of the tenor

---

[23]Bergquist (1964:273, 275) apparently did not realize that there was a second part to the chanson, or assumed a form that would close on the first half. He uses the interior cadence as an illustration and states that Aron was mistaken in suggesting that the chanson ends on D.

[24]This is discussed further in Chapter 3, under 'modal types'.

illustrates, but the conclusion on D means that this is not a possibility for consideration by Aron.

Final on *G sol re ut.* Among the works cited as illustrations of Mode 1 with a final on G and flat signature are two Josquin masses based on pre-existing models: *Missa Ave maris stella* and *Missa D'ung aultre amer.* Aron's criteria for assigning these works to Mode 1 are 'their procedure, structure, and complete diapaison' (1525/1950:213, note h). Both examples are straightforward parallels to Mouton's *Congregate sunt gentes* and both are easily classified on the basis of their pre-existing melodies. The *Missa D'ung aultre amer* concludes each section with the type of cadence Aron described as 'prolonged', although in this instance the tenor sustains the final (see Example 2.14).

Final on *A la mi re.* Aron places greater emphasis on 'procedure' as modal arbiter with the possibility of an irregular ending, such as Mode 1 on A. As he points out, *A la mi re* has the 'double function' of an irregular ending (confinal) and psalm-tone difference in Modes 1 and 2 and psalm-tone difference of Modes 3 and 4. He is once again explicit about the mode-determining voice: 'For this reason, then, you will assign such a *tenor* [emphasis added] to the first or second tone only when you find the proper form' (1525/1950:213). Two examples are cited, one each for Mode 1 and 2. While the 'proper form', that is the melodic emphasis of the species of fifth, and the 'procedure', the upward range required of Mode 1, are seen in Josquin's *La plus des plus,*[25] there is also a sense of play which relies on A as a turning point between the species of fifth, D-A, and the second species of fourth, E-A.[26] This is evident in the opening of the chanson (see Example 2.15).

---

[25]See Powers (1991:36-8).

[26]The special role of *a la mi re* is discussed in Chapters 3,4, and 6 below.

In Compère's *Si mieulx*, one is also aware of interaction among various species in each vocal line. Of the works Aron cites, this one poses the greatest difficulty (for the modern reader) in comprehending Aron's modal assignment.[27] For Aron, the modal assignment is unequivocal:

> For this reason, then, you will assign such a tenor to the first or second tone only when you find the proper form. As in *La plus des plus* by Josquin, which is of the first tone in view of the course of its diapente and its upward range, or in *Si mieulx* by Loyset Compère, which is of the second, as will be readily evident (1525/1950:213).

To understand this assignment, it is necessary to reconstruct a possible set of assumptions upon which Aron based his categorization of this work. A comparison of the ranges of the tenors of *La plus des plus* and *Si mieulx* (see Example 2.17) shows them to be similar, and it can not be on this basis that Aron made his distinction. The tenor of *Si mieulx* (given in Example 2.16) also shows similarities to the Mode 1 characteristics of *La plus des plus*: in both the registral high point, f^1, is achieved near the middle of the piece with an emphasis on the range d-f^1 (see Example 2.18). However, in *Si mieulx*, the emphasis is not on the species of fourth and fifth associated with Mode 1. There are no cadences to D; hence, Aron cannot be suggesting (as appears to be the case with *La plus des plus*) that A is acting as an alternative termination to D in a work which otherwise exhibits all the expected characteristics of a Mode 1, D-final piece: species, procedure, etc.—in other words the function he attributes to a psalm-tone *differentia*. It may therefore be obvious that *Si mieulx* can not be assigned to Mode 1, but its assignment to Mode 2 remains problematic.

---

[27]Discussed by Powers (1991:36-9).

It will be useful to consider the alternatives open to Aron. An ending on *A la mi re* (with no signature) signaled an irregular ending or psalm-tone *differentia* of Modes 1 or 2, or the psalm tone *differentia* of the third and fourth modes. Aron's understanding of the way in which a psalm tone *differentia* functions as a 'final' is explicitly described:

> [D]o not be surprised, for composers sometimes observe the procedure of a given tone at the beginning and in the course of a composition, ending then in accordance with the difference of the plainsong (1525/1950:213).

This is exactly what occurs in *La plus des plus.* That, by comparison, this is not the case in *Si mieulx* is obvious. An examination of the tenor, however, shows even less affinity with the species and procedure expected of Modes 3 and 4. A straightforward process of elimination based on the criteria Aron established in his introduction and refines as he goes will lead to the classification. The argument would run something like this: 1) The work ends on A, therefore it must be Mode 1, 2, 3, or 4. 2) From an examination of the species, the possibility of A acting as a psalm-tone difference for Modes 1, 3, or 4 is eliminated. This leaves Mode 2, the only mode Aron cites for which A does not serve as a *differentia.*

While *La plus des plus* and *Si mieulx* share the same compass and termination, there are essential differences in the species which motivate Aron's different classifications. In his hierarchy of modal determinants, the option of the psalm-tone *differentia* appears to be preferable if available. He mentions endings on confinals in his introduction, but then does not resort specifically to them in the text.[28] Bergquist was also troubled by Aron's assignment of *Si mieulx*:

---

[28]Powers (1991:36-9) suggests that *A la mi re*
has to be taken as a true confinal [in *Si mieulx*], functioning with the borrowed authority of a regular final, as in a number of chant melodies and melodic types

> The examples of the first and second modes ending on A are among the thorniest in the treatise. Both are fairly clearly Aeolian rather than Dorian, although Compère's *Se mieulx* is centered largely around D Ionian and the ending on A is a bit of a surprise. The distinction between authentic and plagal in the two examples is unclear, since the tenors have identical ranges and tessituras. The sole remaining distinction might be the internal cadences in the tenor, but these are also unenlightening (1964:276-9).

If other voices are taken into account, Bergquist's objections to a Mode 2 assignment are eased; the species of fourth of Mode 2 is clear in both outer voices in the final cadence (although a variety of melodic patterns are used in the rest of the chanson). See Example 2.19.

* * *

Aron's other assignments to Mode 2 are straightforward; he cites only one example for a final on *D la sol re*: Josquin's *Missa Hercules dux Ferrariae.* Aron makes his reason for the classification clear: the tenor does not make full use of the upper limit of the species of fifth, hence the assignment to the plagal. It is noteworthy that *D la sol re*, not *D sol re*, is considered the final, otherwise an assignment to Mode 1 would follow. The tenor ostinato is given in Example 2.20.

> that terminate at *a la mi re*. That being so, the *ambitus* is distributed above and below the final in a balanced fashion, in short, it is a plagal ambitus. The tenor ... is in 'mode 2 transposed', as though from its 'regular' location where its final would have been *D sol re*.... [T]he borrowed authority in the confinal overrides any impropriety in the species.

My interpretation does not refute Powers' argument, and the two positions need not be viewed as incompatible, yet Powers' formulation seems unnecessarily complicated if Aron is read literally. While Aron may have been capable of such a level of sophistication, it would give a rather uncharacteristic irony to his description of this assignment as an 'evident' one. He is at pains more than once to stress the difficult nature of his task and deserves to be taken at his word when he says something is obvious. I am grateful to Professor Powers for discussions which took Aron's assignment of this chanson as a point of departure.

Aron points out that because of registral difficulties it is rare (although possible) to find examples of Mode 2 in the position *D sol re*. For compositions on *G sol re ut* with a flat signature, five examples of Mode 2 are cited[29] and it is clear by analogy that the modes of these compositions are recognized, as Aron describes it, by 'their extended downward range' (1525/1950: 213). See the tenors in Example 2.21. In each case, the species of fourth and species of fifth encircling the final are clearly outlined. There are also occasional hints of the species of fifth usual to Mode 1 with a final on D as shown in the annotations. Most striking in an examination of the entire three-part polyphonic context are the regularity of certain features in all four works. While the bassus may occupy either the authentic (*Virgo celesti, De tous biens playne*) or plagal range (*Ce n'est pas*) or even a mixture of the two (*D'ung aultre amer*), the melodic emphasis of the upper line is on the plagal form of the mode, as illustrated by the opening of each work in Example 2.22.

* * *

This outline of Aron's Mode 1 and 2 examples gives a strong sense of his approach to modal classification. From a similar study of all of his examples, it is possible to outline the most significant *topoi* encountered in the rest of Aron's treatise. Some of these have already been hinted at, but are more thoroughly developed or illustrated in the other modal categories. These topics include the psalm-tones *differentiae* as irregular terminations, cadences, and transformations of the species.

---

[29]Of these, Powers (1991:31-2) discusses Hayne's *De tous biens playne*.

Psalm tone differentiae

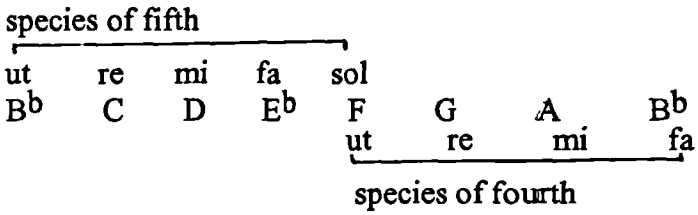
Examination of one example cited by Aron will set out clearly his understanding of the psalm tone *differentiae* as 'pseudo finals';[30] his discussion of the villancico *Nunqua fue peu maior*. As Bergquist (1964:286) pointed out, Aron cites in error an 'irregular' ending on G, not realizing that the villancico would conclude with a final repeat of the first section, which cadences unequivocally on E (see Example 2.23). The cadence to G cited by Aron is an interior cadence also seen in another Mode 3 work cited by Aron, *Malheur me bat*. Even if this were the final cadence of the work, its classification in Aron's terms is straightforward and analogous to the classification of *La plus des plus*. While the so-called final would initially point to a different mode in his hierarchy of modal features, all other considerations (species, procedure) point to the actual mode of the tenor. The composer has followed correct procedure throughout but concludes not on the expected final but on a 'pseudo final'—a process Aron sees as best explained by an analogy with the way Psalm-tone differences are used. It is clear that Aron invoked the differences, which may seem irrelevant to the many types of compositions he examines, for the compositional technique they represent. They provided a way of categorizing a tenor clearly 'in a mode' which concluded on a pitch other than the modal final. Had Aron realized that *Nunqua fue* was a villancico, this example of a Mode 3 work concluding on the difference G would no longer exist, but his mistake makes all the more obvious his criteria.

---

[30]Use of the term 'pseudo final' follows Powers (1991).

Cadences

The first time Aron actually mentions cadence as a modal determinant is in the context of Hayne's *La regretée,*[31] which he assigns to Mode 5, with an ending on B-flat. Aron cites three reasons for his classification of *La regretée*: its species, cadences, and upward range. The range of the tenor (see Example 2.24) is unambiguously that of Mode 5 (in its 'normal' position, F-f—the final is not 'transposed' to B-flat).[32] The signed E-flat in the contratenor hints at the movement of the species of fifth from F to B-flat, which indeed occurs (see Example 2.24b). However, there are frequent cadences to F, and the opening of the rondeau might give the appearance of being an ordinary Mode 5 work, but the melodic profile is unlike the clear-cut pattern of the Mode 5 works on F which emphasize F-(A)-C, not F-B-flat-(D) as in this work (see Example 2.24c). So it would appear that this chanson is similar to those works Aron has previously described as concluding with a *differentia*; it uses the range of Mode 5 and many of its normal cadence notes, but concludes on a pitch other than the final. However, Aron must deal with B-flat differently because it is not a difference for Mode 5. It is conceivable that Mode 5 could be 'transposed' to B-flat, but that is not the case here, for then the range would be constituted of the species thus:



[31]Discussed in Powers (1991:42-7).

[32]Aron's view of 'regular' and 'irregular' finals means that he never suggests 'transposition'. A species may be transformed into another, for example by the addition of B-flat, but only D, E, F, and G are true finals, and it is they which govern the interpretation of ambitus. This is Aron's first principle and underlies his whole approach to modal classification.

So while B-flat 'governs' the species, the ambitus determines the modal assignment. This results in a distinctive superius which never achieves the full ambitus, but instead builds around a very basic melodic pattern of structural pitches, given in Example 2.24d.

The discussion thus far has concentrated on the first seven chapters of the *Trattato*; Aron's citation of music in this section of the treatise clarifies his modal assignments and sets the work apart for its concrete connection to polyphony. These chapters contain the essentials of modal definition. In chapters 8 to 24, Aron briefly recites regular and irregular endings and beginnings, following traditional practice.[33] When Aron's lists are taken together (see Table 2.3), it is not surprising that cadences do not rank with final, species, and procedure in his modal hierarchy. As Bergquist observed, 'considering both regular and irregular cadences, any mode may cadence on any note' (1964:308-9). Although Aron states in chapter 8 that a composition which fails to use the proper cadences is comprehended with difficulty, only in the case of *La Regretée* does he hint at the importance of cadences. While it is clear that final, confinal, and differences have primary cadence functions, it is not obvious that Aron was suggesting any further hierarchy by his inclusion of lists for beginnings and cadences.

---

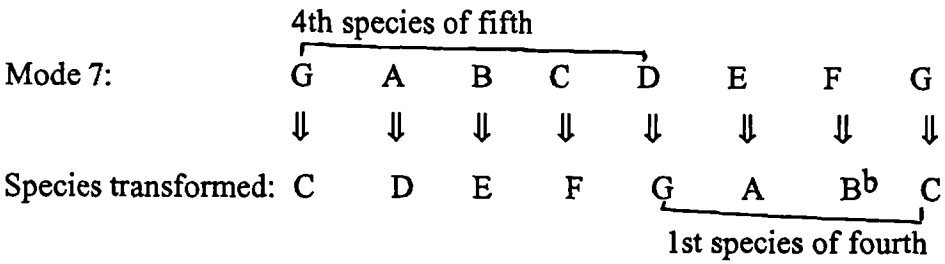
[33]Regular endings are given in Chapters 9 to 12. At the end of Chapter 12, Aron gives a list of regular finals an octave above those listed in Table 2.3. Irregular endings are given in Chapters 13 to 20. At the end of the chapters dealing with irregular endings, Aron illustrates the form (species) of the mode. Beginnings are covered in Chapters 21 to 24.

Table 2.3: Aron's lists for Beginnings and Endings

Mode	Cadences		Beginnings
	Regular	Irregular	
Mode 1	*D sol re* *F fa ut* *G sol re ut* *A la mi re*	*E la mi* *B mi acute* *C sol fa ut*	*C fa ut* *D sol re* *E la mi* *F fa ut* *G sol re ut* *A la mi re* *D la sol re*
Mode 2	*C fa ut* *D sol re* *F fa ut* *G sol re ut* *A la mi re* *A re*	*E la mi* *B mi acute* *C sol fa ut*	*A re* *C fa ut* *D sol re* *E la mi* *F fa ut*
Mode 3	*E la mi* *F fa ut* *G sol re ut* *A la mi re* *B mi acute* *C sol fa ut*	*C fa ut* *D sol re*	*E la mi grave* *F fa ut* *G sol re ut* *A la mi re* *B mi acute* *C sol fa ut* *E la mi acute*
Mode 4	*C fa ut* *D sol re* *E la mi* *F fa ut* *G sol re ut* *A la mi re*	*B mi acute* *C sol fa ut* *D la sol re*	*C fa ut* *D sol re* *E la mi* *F fa ut* *G sol re ut* *A la mi re*
Mode 5	*F fa ut* *A la mi re* *C sol fa ut*	*C fa ut* *D sol re* *E la mi* *G sol re ut* *B mi acute* *D la sol re*	*F fa ut* *G sol re ut* *A la mi re* *C sol fa ut* *F fa ut acute*
Mode 6	*C fa ut* *D sol re* *F fa ut* *A la mi re* *C sol fa ut*	*E la mi* *G sol re ut* *B mi acute* *E la sol re*	*C fa ut* *D sol re* *F fa ut* *A la mi re*
Mode 7	*G sol re ut* *A la mi re* *B mi acute* *C sol fa ut* *D la sol re*	*D sol re* *E la mi* *F fa ut*	*G sol re ut grave* *A la mi re* *B mi acute* *C sol fa ut* *D la sol re* *G sol re ut acute*
Mode 8	*D sol re* *F fa ut* *G sol re ut* *C sol fa ut*	*C fa ut* *E la mi* *A la mi re* *B mi acute* *E la sol re*	*C fa ut* *D sol re* *F fa ut* *A la mi re* *C sol fa ut*

Transformations of the species

Aron begins his discussion of Modes 7 and 8 by citing two terminations[34] below the regular final: *Gamma ut* and *C fa ut.* It is easily understood that a descent to the plagal ambitus is impossible in the Guidonian gamut when a tenor terminates on *Gamma ut* and Aron feels no need to cite examples; the problem of *C fa ut* is more complicated and Aron's two examples seem baffling at first. Only when the position of *C fa ut*—below the regular final and therefore not available as confinal or psalm-tone difference—is taken into account, along with Aron's assertion that these works do not have the 'proper diatessaron' (1525/1950:217) can some sense be made of his assignments.[35] The species rather than the termination are the guiding factor. In De Orto's *Mon mary m'a diffamee* (Mode 8), the signature (one flat in superius, altus and tenor; two flats in the bassus) creates the possibility of a transformation of the species proper to Mode 7:



C fa ut is the lowest note of the tenor, but the species are not used as would occur with the transformation outlined above. Instead, the most common phrase of the tenor is the normal species of fourth for Mode 8: *D sol re* to *G sol re ut.* The tenor does not have a full ambitus—another indication that a plagal assignment is appropriate. The other species of fourth which occurs frequently, F - B-flat: *ut re mi fa*, while common to Mode 6, is also contained within the species of fifth proper to

---

[34]On the distinction of termination and final, see Chapter 4 below.

[35]Powers (1991:51-6).

the fourth *maneria.* The chanson concludes with the appropriate species of fifth, albeit moved to a different position. This is illustrated by a paradigmatic representation of the popular melody of this canonic tenor in Example 2.25.[36]

Aron's Classifications and Josquin's Motets

Aron's modal categorizations allow for a wide range of interpretation about the significance of such assignments and the basis on which they were made.[37] Accepting Aron's doctrinaire approach to modal classification at face value results in quite a different view of the modal distribution of Josquin's motets than either Perkins

---

[36]Hewitt (*Canti B*: 38) describes the chanson as twice-transposed Dorian. As Powers (1991:55-6) pointed out, there are numerous instances where this tenor would require the addition of E-flat, thus altering the species indicated here, but not altering Aron's classification. Powers discusses another setting of the tune in *Canti C* which is one degree higher and which would by Aron's criteria be classed as Mode 1--a clear instance of the way modern theory (which would define the two settings as transpositions of the same mode) and Aron's approach differ.

[37]After a detailed study of the compositions Aron cited in support of his adaptation of modal theory to polyphony, Powers (1991) concluded that the question of his title 'Is Mode Real?', had to be given a negative answer. Other authors have reached a similar conclusion from a different approach to the question. Although Bergquist (1964:271-307) examined Aron's examples and summarized the modal features of the works Aron cites, he appears to have sought in Aron's descriptions a rather different understanding of modality than that which Aron intended. As a result, he often faulted Aron's classifications. Bergquist rightly observed that:

> [Aron's] method of determining mode in polyphony was essentially to consider the mode of the tenor part to be the mode of the whole complex of voices. Here obviously is a crucial problem. The concept of mode was developed to explain the behavior of the unaccompanied chant, and its application to polyphonic complexes necessarily, it would seem, leaves unaccounted for the relationship between or among voices, the chordal element. In any case, this aspect of polyphony in its relation to modality did not attract the attention of Aaron or any other theorist of his period (1967:102).

But Bergquist's reluctance to accept *in toto* Aron's approach to modality results in the suggestion that several of Aron's classifications are erroneous and that a twelve-mode system (the incorporation of aeolian and ionian modes) provides a more accurate set of categories with which to discuss modality (1967:121).

(1973) or Urquhart (1982) would suggest. Table 2.4 provides a hypothetical modal categorization of Josquin's motets that follows the example of Aron's music citations in the *Trattato*. Such a classification serves to highlight the tension between Aron's traditional modal theory and Josquin's practice. The nature of Aron's approach to modal theory means that the two must be compatible, however; he makes it clear at the outset of the *Trattato* that his goal is to show how the modes may be recognized in polyphony, not whether they exist, are relevant, or were a compositional consideration. Attempting to follow Aron in the literal way that I have is to use his treatise as a guide for recognizing the modes. It also provides a first step in grouping Josquin's motets by the modes of their pre-existing melodies and tenor terminations. Tangentially, some surprising distribution patterns emerge (presumably of no significance to Aron), discussed in greater detail in the following chapters, which appear to relate to Josquin's tonal conventions.

Table 2.4
Hypothetical Modal Categorization of Josquin's Motets following Aron *Trattato*, chapters 1-7

Motet[1]	Text	Cantus firmus mode	Clef[3]	Tonal Type[2] System	Final[4]
MODE 1					
23. *Gaude virgo*	sequence	?	g2-c1-c4-c4		D
S1. *Monstra te*	hymn	1	[ ]-c1-c4-f4		D
95. *Salve regina*	marian antiphon	1	[c1]-c1-[c4]-c4		G[D]
69. *Mirabilia testimonia*	psalm		c1-c3-c4-f4		A[E].D
10. *O Domine Jesu Christe*	preces		c3-c4-c4-f4		D.A.A[E].F.D
59. *Domine, ne in furore*	psalm		c1-c3-c4-f4		E[B].D[A]
2. *Ave Maria ... benedicta tu*	preces	1	g2-c3-c3-f4	b	G
8. *Germinavit radix (O admirabile)*	antiphon	1	c1-c3-c3-f4	b	G
25. *Virgo prudentissima*	antiphon	1	c1-c3-c4-f4	b	G
26. *Victimae paschali laudes*	sequence	1	c1-c4-c4/c3-f4	b	G.G
94. *Ave maris stella*	hymn	1	g2-c1-c3-f3	b	G.G
S2. *Honor, decus*	hymn	1	c1-c3-c4-c5	b	G
48. *Salve regina (5vv)*	marian antiphon	1	g2-c3-c3-c3-f3	b	G.G[Bb].G
50. *Pater noster / Ave Maria*	preces	1	c1-c3-c4-c4-c4-f4	b	G.G
35. *Virgo salutiferi*	preces	1	[c1]-c4-c4-c4-f4	b	Bb C.G
MODE 2					
9. *Ecce Maria (O admirabile)*	antiphon	2	g2-c3-c3-f4	b	G
14. *Tu solus*	preces		c1-c3-c4-f4	b	G.G
24. *Vultum tuum deprecabuntur*	preces	2	c1/g2-c3-c3/c4-f4	b	G.G.G.G.G.G.G
30. *Ecce, tu pulchra es*	Song of Songs		c1-c3-c4-f4	b	G
45. *O virgo prudentissima*	preces	2	c1-c3-c4-c4-c4-f4	b	G.G
27. *Illibata Dei*	acrostichon		c1-c4-c4-c4-f4	b	G.G
60. *Usquequo, Domine*	psalm		c1-c3-c4-f4	b/bb	D.G
13. *Domine, non secundum*	tract	2	c1-c3-c4-f4	b	G.Bb.G.G
33. *Praeter rerum*	sequence		c1-c3-c3-c4-f4-f4	b	G[Bb].G
51. *In exitu Israel*	psalm	i.p.	c1-c4-c4-f4	b	G.A.G
83. *O virgo virginum*	antiphon	2	c1-c3-c3-c4-f4-f4	b	F[A].G
52. *Qui habitat*	psalm		c1-c4-c4-f4	b	A[C] D
MODE 3					
66. *Jubilate Deo*	psalm		c1-c4-c4-f4		E.E
19. *Magnus es tu*	preces		c1-c4-c4-f4		A[E].E
64. *Domine, ne projicias me*	psalm compilation		c1-c4-c4-f4		A[E].E
11. *Qui velatus*	sequence	var.	c1-c3-c4-f4		E.E.A.E.E.E
*37. *Miserere mei Deus*	psalm		c1-c3-c4-c4-f4		E.E.A[E]
43. *Misericordias Domini*	psalm compilation		c1-c3-c4-f4		E[G].A.A[E]
15. *Liber generationis*	genealogy		c1-c3-c4-f4		E[G].A.E
16. *Factum est autem*	genealogy		c1-c3-c4-f4		E[G].A[E] G
39. *Domine, ne in furore* (low vv)	psalm		c4-c4-c4-f4		A[E].E[G]
75. *Responde mihi*	lection		c1-c3-c4-f4		E[B].E[B]
92. *Domine, exaudi*	psalm		c1-c3-c4-f4		E[B].A[E].E
96. *O bone et dulcissime Jesu*	preces		c1-c3-c4-f4		E[B].A
89. *Domine Dominus noster*	psalm		c2-c3-c4-c4-f4		E[B]
6 *Quando natus (O admirabile)*	antiph n	3	c1-c3-c3-f4	bb	D
MODE 4					
7. *Rubem quem (O admirabile)*	antiphon	4	c1-c3-c4-f4	b	A
32. *Huc me sydereo*	preces	4	c1-c4-c4-f4-f4	b	A.D[A]
34. *Ave nobilissima*	preces	4	c1-c4-c4-c4-f4-f4	b	A.D[A]
47 *De profund s*	psalm		c2-c4-f3-f5		A[E] E

MODE 5

S6. *Descendi in ortum*	Song of Songs		c1-c3-c4-f3	b	F
22. *Ut Pheobi radiis*	solmisation		c1-c3-c4/c3-f4	[b in T]	D,F
*36. *Stabat mater*	sequence		g2-c3-c3-c4-f4	b	C[G],F
*38. *Alma redemptoris*	marian antiphon	5	c3-c3-c3-f4	b	A,F
53. Benedicite, omnia opera	canticle		g3-c3-c3-f3	b	F[A]
68 *Laudate pueri*	psalm	5	c1-c3-c3-f3	b	F F[C]

MODE 6

20. *Planxit autem David*	2 Kings 1:17-27	6	c1-c3-c4-f4	b	F,F,F,F
S3. *Regina caeli*	Marian antiphon	6	c1-c3-c3-f3	b	F
42. *Inviolata, integra*	sequence	6	c1-c3-c4-c4-f4	b	A,A,F
82. *Absolve quaesumus*	preces	6	c1-c2-c3-c4-f2-f4	b	A
65. *Dominus regnavit*	psalm		c1-c3-c4-f4	b/bb	F,F
*5. *O admirabile*	antiphon	6	c1-c3-c4-f4	b	Bb
86. *Sic Deus dilexit*		6	c1-c3-c3-c4-[f3]-f4	b	F[C]
87. *Christus mortuus est*		6	c1-c3-c3-c4-f3-f4	b	F[C]
1. *Ave Maria ... virgo serena*	preces	6	g2-c3-c3-f4		C
3. *Mittit ad Virginem*	sequence	6	g2-c3-c3-f4		C,C
12. *Ave verum*	sequence	6	g2-c1-c4		F,F,C[G]
73. *In Domino confido*	psalm	6	g2-c3-c3-f3		C,C[G]
28. *Homo quidam fecit*	responsory	6	g2-c3-c3-c4-c4		C[G],C

MODE 7

-	-	-	-	-	-

MODE 8

58. *Stetit autem*	lection		c1-c3-c4-f4		G,G
67. *Paratum cor meum*	psalm		c1-c3-c4-f4		G,C[G],G
46. *Benedicta es*	sequence	8	c1-c3-c4-c4-f4-f4		G[D] G,G

CLASSIFICATION UNCERTAIN

17. *Missus est Gabriel*	antiphons	?&1	c1-c4-c4-f4	b	G
18. *O bone et dulcis Domine*	preces	1&4	c1-c3-c4-f4		D
21. *Alma redemptoris / Ave regina*	marian antiphons	5&6	c1-c3-c3-f4		E,C

APPEAR TO BE UNCLASSIFIABLE IN ARON'S TERMS

31. *Memor esto verbi tui*	psalm		c1-c3-c4-f4		E,A[E]
56. *In principio erat verbum*	Gospel		g2-c3-c3-f3	b	D[F],D[A],F[A]
79. *In illo tempore assumpsit Jesus*	Gospel		g1-c3-c3-f4		C
90. *De profundis clamavi* (5vv)	psalm with add.		c1-c3-c4-f3-f4		E[G]
S5. *Absalon fili mi*	compilation		c3-c4-f4-f5	b/bbb/bbb b	Bb[F]

Notes to Table 2.4:

[1]Motets are identified according to the numbering of the *Werken*. An asterisk (*) before the motet number indicates a work cited by Aron.

[2]Tonal types are determined following Powers (1981). Tonal types are given only as a point of reference and do not always correspond to the modal categories assigned here. Where possible within modal categories, motets with the same (or similar) tonal types have been grouped together.

[3]The clef configuration of this repertory is less regular than that of the repertory with which Powers was concerned, thus cleffing has not been abbreviated here; the clef of each voice is indicated and brackets are used to indicate the clefs of canonic voices.

[4]The lowest pitch of the concluding sonority for each section of a motet is given. Again, a modification has been made to the usual 'tonal type' indications to allow the final of the tenor to be given. If the tenor concludes on another pitch, it is given in brackets, i.e.: A[E],E represents a motet in which the *prima pars* ends with an A in the bassus and E in the tenor, and the *secunda pars* concludes with either an octave or unison E in tenor and bassus.

The motets in this table comprise a circumscribed list of only those attributed to Josquin with relative certainty.[38] Eight motets are listed without classification at the end of Table 2.4. Aron would probably have classified the first three: these motets use plainsong of more than one mode, and I am uncertain to which Aron would have given priority.[39] The five remaining motets are more difficult. Although Aron admits the existence of 'unclassifiable' works, he cites no examples.[40]

An unequal distribution of Josquin's motets across Aron's modal categories is perhaps to be expected,[41] but the actual imbalance of the classification, shown in numerical summary in Table 2.5, is surprising nevertheless. There are no motets in

---

[38]This table omits motets with plausible attributions to other composers. Also excluded are Osthoff's 'Satzfehler' motets (1962:I,19 and II,28) following Sparks (1976:345-59) and a group of motets that have come under repeated questioning on stylistic grounds. See the works list in Noble (1984:66-72,77-81).

[39]Aron does not discuss works that use more than one cantus firmus and incorporate material of different modes. Of the three examples cited here, *Alma Redemptoris / Ave Regina* (*Werken* 21) suggests the explanation of either a mixing of the plagal and authentic modal pair 5 and 6, or, more likely, simply mode 6, the mode of the antiphon in the tenor. *O bone et dulcis Domine Jesu* (*Werken* 18) quotes two antiphons of different modes successively in long notes in the bassus along with the *Pater noster* in the tenor. *Missus est Gabriel* (*Werken* 17) also appears to use two antiphons of different source modes successively as the basis of points of imitation, although a source for the first antiphon has yet to be identified.

[40]It is possible that Aron would have classified four of the five works listed here, but I have been unwilling to suggest an argument that goes beyond the examples he supplied. *Memor esto verbi tui* (*Werken* 31) has many of the criteria of a mode 1 work, but its conclusion on E is incompatible with the species and E is neither a confinal nor the psalm-tone pseudo final (see Chapter 4). The gospels *In principio erat verbum* (*Werken* 56) and *In illo tempore assumpsit Jesus* (*Werken* 79) suggest mode 5 with irregular endings on the *differentia* A and the confinal C, respectively, but the relationship of these motets to the gospel tone makes such a classification unlikely. See the detailed discussion of these two motets in Chapter 7. Aron might have described *De profundis clamavi* (*Werken* 90) as Mode 3 ending on the *differentia* G, but it lacks the confirmation of appropriate species and ambitus (see Chapter 6). *Absalon, fili mi* (*Werken* Supplement 5) with its famous signature configuration and low range is irreconcilable with Aron's theory. The authorship of this motet has recently been questioned by van Benthem (1989) and Rifkin (1991).

[41]I am unaware of any studies which examine whether composers favour certain modes or tonalities or whether the chants most frequently incorporated in polyphony are drawn more frequently from any particular modes. As will be shown below, for Josquin, at least, text type, chant association, and choice of chant contribute to a clear sense of the composer's tonal preference and may suggest personal rather than generic conventions.

Mode 7 and only three in Mode 8.[42] All of the Mode 1 motets with a G final and B-flat signature are based on plainsong. Similarly, most of the Mode 6 motets are based on chant, which is thus responsible for the classification.[43] Only one of the fourteen Mode 3 motets appears to rely on plainsong, but three of the Mode 4 classifications are made on that basis and all are exceptional settings;[44] the other motet in this category, *De profundis*, is remarkable for its low tessitura.[45]

---

[42]But see further on the sources and questions of authenticity regarding *Stetit autem* and *Paratum cor meum* in Chapter 8.

[43]This is an important distinction. Without this chant basis, Aron would undoubtedly have classed the last five works listed under Mode 6 as Mode 7 or 8, which seems to have been his response to endings on *C sol fa ut*. He mentions the ending *C sol fa ut* only as a difference of Mode 5 in his discussion of the third *maneria*; it is notable in the course of this discussion that Aron mentions the possibility of confinality but disallows it, making explicit what was previously an implied preference for the differences as a means of explaining irregular endings. He cites a single work, Obrecht's *Si sumpsero*. Among Aron's assignments in mode 7 and 8 that have proved most difficult for the modern reader to accept are those of works ending on *C sol fa ut*. Invariably, these works tend to be classed as 'Ionian' or 'Hypoionian', following Glarean's later twelve-mode system. (See, for example, Bergquist, 1964:304-5; Hewitt, *Canti B*, 34; and Glarean 1547/1965:II,263, 434.) Unlike Tinctoris, Aron does not seem to recognize the 'transposition' of the final (F) of modes 5/6 to C when there is no B-flat signature. I encountered a serious difficulty with Josquin's *Mittit ad Virginem*, which Aron identifies as Mode 7. The sequence melody on which the motet is based was notated on C and, as far as I have been able to discover, identified as Mode 6. Whether Aron was unaware of the chant--or its usual modal classification--must remain a matter for speculation. None of his other citations for *C sol fa ut* make use of a pre-existing melody. See the extensive discussion of these works in Powers (1991:51-61).

[44]*Rubem quem* is part of the antiphon cycle *O admirabile commercium* (see Chapter 4); *Huc me sydereo* and *Ave nobilissima* are discussed in Chapter 6.

[45]See Glarean's classification of this motet below; see Chapter 6 regarding the conflicting attribution of this motet.

Table 2.5:

Modal distribution of Josquin's Motets following Aron *Trattato*, ch. 1-7

Numerical Summary

Mode 1: 15 (11)
D:5(2)
A:1
G/b:9(9)

Mode 2: 12 (5)
G/b:11(5)
D/b:1

Mode 1+2 = 27(16)

Mode 3: 14 (1)
E:7
G:2
A:2
B:2
D/bb:1(1)

Mode 4: 4 (3)
A/b:3(3)
E:1

Mode 3+4 = 18(4)

Mode 5: 6 (2)
F/b:4(1)
A/b:1
C/b:1(1)

Mode 6: 13(11)
F/b:4(3)
C/b:2(2)
C:3(3)
G:2(1)
A/b:1(1)
Bb/b:1(1)

Mode 5+6 = 19(13)

Mode 7: 0

Mode 8: 3(1)
G:3(1)

Mode 7+8 = 3(1)

Other: 8(3)

Subdivisions of each modal category are totaled according to *tenor* final and system, e.g.: D/b:1 signifies one motet with tenor final D, *cantus mollis*; C:3 signifies three motets with tenor final C. Parentheses indicate the number of classifications based on a pre-existing melody.

Not surprisingly, this repertory sits uneasily for us with Aron's straightforward adaptation of traditional monophonic theory to a polyphonic repertory. But extending Aron's theory by invocation of the repercussion, other voices, and appropriate cadences tones does not ease the fit of Josquin's motets and modal theory,[46] nor does recourse to later twelve-mode theory of Glarean.[47] Similarly, the thesis that an evolutionary view of major-minor tonal theory provides a more appropriate model begs the question of those works that in fact are well described by modal terminology.[48]

Glarean's *Dodecachordon* and Josquin's Motets

Heinrich Glarean's *Dodecachordon* will be treated more circumspectly here than Aron's *Trattato*. Glarean's treatise and his examples have been the subject of

---

[46]Urquhart considered these features in his modal assignments. He described his method for assigning mode thus: 'In most cases this modal assignment is derived from the ambitus and modal profile of *phrasis* (to use Glarean's term) of the tenor voice. In many cases . . . I decided that some other voice contributed to or was more important in determining the mode. Aaron's recommendation was followed in most cases of motets with a plainchant *cantus firmus*' (1982:37-8).

[47]Bergquist (1964:224-314) offered this alternative:

> The present writer has examined all of Aaron's examples and assigned each to a *maneria* and final. . . . This assignment, which considers the entire complex of voices, takes the root of the final chord as the final or tonic and whichever diatonic octave above it predominates in the composition as the *maneria*. The *maneriae* are designated as Dorian, Phrygian, etc., in order to be able to refer to Aeolian and Ionian; protus, deuterus, etc., will continue to refer to *maneriae* as assigned by Aaron, while Dorian, Phrygian, etc., will represent the present writer's assignment. (:271)

[48]This is particularly evident in neo-Schenkerian analyses, most notably Novack (1970, 1976, and 1983). This continuum of perspective--eight-mode theory, twelve mode theory, functional tonality--may be conveniently examined through one of Josquin's motets, *Miserere mei Deus*, discussed by the three advocates of these perspectives--Aron, Glarean, and Novack. See below.

extensive study; my comments throughout this thesis suggest not so much a revision of the received view of the *Dodecachordon* itself as of its relationship to Josquin's motets and Glarean's role in shaping both the sixteenth century and modern perception of Josquin. Glarean's anecdotal remarks about Josquin and his descriptions and inclusion of numerous works are well-known.

The third book of the *Dodecachordon* deals with polyphony, including over 120 examples illustrating proportions and the modes. Of these, twenty-nine are attributed to Josquin—including the motets cited in Table 2.6.[49]

Table 2.6: Josquin's Motets cited by Glarean

Motet cited by Glarean	Glarean's classification	Chant mode	Aron*
13. *Domine non secundum*	Hypodorian	2	[2]
26. *Victimae paschali laudes*	Dorian/Hypodorian	1	[1]
47. *De Profundis*	Dorian/Hypodorian**		[4]
19. *Magnus es tu Domine*	Hypophrygian		[3]
16. *Factum est autem*	Phrygian/Hypophrygian		[3]
15. *Liber generationis*	Phrygian/Hypophrygian		[3]
46. *Benedicta es*	Mixolydian	8	[8]
37. *Miserere mei Deus*	Hypoaeolian		3
1. *Ave Maria ... virgo serena*	Hypoionian	6	[6 or 7?]
12. *Ave verum*	Ionian	6	[6 or 7?]
20. *Planxit autem David*	Ionian/Hypoionian	6	[6]

*Classifications following Table 2.4 are given in brackets. Aron actually cites only one work which Glarean also cites, *Miserere mei Deus*.

**In his discussion of *De Profundis*, Glarean describes the work as an example of 'Dorian ad Phrygian', but his overall classification is Dorian mixed with Hypodorian.

[49]Glarean discusses *Factum est autem* and *Miserere mei Deus*, but does not include the music in the text. On the *Miserere* he comments that 'this song is in everyone's hands' (1547/1965:II,259).

The most direct conflict of Glarean's and Aron's classifications occurs with works in which the tenor terminates on A or C, and here one sees most clearly the fundamental difference in their theoretical perspectives. Aron represents a head-on clash of monophonic (plainsong) modal theory and a polyphonic repertory represented by Petrucci's (and to a lesser degree, Antico's) prints. His aim is to illustrate how the former, in its most traditional guise, may be applied to the latter. There is nothing that he claims is new in his theory, rather it is his application which is innovative (for example, the very discussion of polyphony and his dependence on the *differentiae* which get him out of several apparently awkward situations). Glarean's writing stems primarily from the classically-influenced vein of modal theory. Thus, he must explain how eight-mode theory has 'gone wrong' in its deviation from the original classical theory and deal with the resulting inconsistencies—inconsistencies which have continued to plague modern writers on modal theory: most notably, the use of B-flat in the first and third *maneriae* and 'irregular' finals, particularly A and C. It cannot be stated too strongly that these theoretical 'inconsistencies' did not exist to Aron's medieval way of thinking, and it is only by accepting this point that any sense of the logic of his modal assignments is to be gained. He is not attempting to illustrate the problems of the modal system; in fact, the opposite—that the traditional eight-mode system is applicable and relevant for polyphony.

Miserere mei Deus: Renaissance 'Analysis' and Modern Theory[50]

The divergences of Aron's and Glarean's viewpoints may be illustrated clearly by their respective comments on Josquin's *Miserere mei Deus*.[51] In the preface to his motet collection of 1538, Johann Ott described the motet with the following words:

> I ask you: who could listen indifferently to [Josquin's] Psalm 51 [*sic*]? Who would not be deeply moved in mind and spirit to a more diligent understanding of the meaning of the prophet[ic] text? Its musical procedures have been fashioned to the mood of the words, which are pressed by the great weight of sins; they are shaped by that most grave repetition [Miserere mei, Deus] with which it implores for mercy. In consequence, the soul is not allowed to take these matters lightly, nor can it fail to be excited to the hope of faith.[52]

The 'musical procedures' to which Ott referred summoned responses from Aron and Glarean that typify their theoretical perspectives. Neither spends very long on the motet, but disagree not only about the mode to which it should be assigned, but whether it represents a plagal or authentic mode. Aron assigns it to Mode 3 and Glarean to his new hypoaeolian category. Their disagreement is not explained simply by Glarean's addition of four new modes to the eight-mode system. Aron describes the motet as ending on *A la mi re*, the psalm tone *differentia* of Mode 3. Had he

---

[50]An earlier version of this section formed the core of a paper by the same name presented to the RMA (London, February 1986). I am grateful to Professors Brian Trowell and Leeman Perkins for detailed and thoughtful comments on that paper.

[51]For a general discussion of this frequently cited work, see Lockwood (1984:261-5); the fullest consideration of the motet's text, its composition, and its reception is provided by Macey (1985).

[52]'...psalmum quinquagesimum primum [*sic*], eum quaeso an quisquam tan negligenter audire potest, ut non simul toto et mente tota feratur ad sententiam prophetae diligentius intuendam, cum et modi ad affectus illius, qui peccatorum magnitudine premiture, conformati sint et ista gravissima repetitio, qua misericordia implorat, non sinat animum aut ociose ista cogitare, aut non excitari ad spem fiduciae...' (*RISM 1538/3*: Preface), cited in Osthoff (1962:II,122).

considered the non-ostinato bearing tenor, he could easily have considered the motet as concluding on E with a prolonged cadence. The close to E (not unlike other final cadences), indicated by the arrow on Example 2.26, coincides with the end of the psalm verse. A similar close is reiterated midway through the concluding 'Miserere' and then extended to a final cadence on A. By his citation of *A la mi re* as final, it is clear that Aron refers to the ostinato tenor, just as he would give priority to a voice carrying a pre-existing melody were it not the tenor. In one sense, the position of this voice as a framework device is straightforward: each psalm verse is punctuated by a statement of the tenor ostinato, 'Miserere mei Deus'. The *prima pars* is accompanied by the progressive downward filling in of an octave (e-E); the *secunda pars*, by an octave ascent (E-e); and the concluding *tertia pars*, by a descent of a fifth to close on A in the tenor (e-A).

Aron's stress on A as pseudo final, even with the extended close from E and the unambiguous close of the *prima* and *secunda partes* on E, hints again at the dual role of *A la mi re* as an alternative cadence point for both the 'D' and 'E' modes. This understanding explains melodic emphases in *Miserere mei Deus* on species (and cadence tones) which would otherwise fly in the face of Aron's explicit statement regarding Modes 3 and 4—most particularly the frequent cadences on D, one of only two pitches excluded from his list of regular cadence tones for Mode 3. For example, in the excerpt from the *tertia pars* in Example 2.27, taken from a context of paired imitation at the interval of the fifth, the first bracket outlines the species of fifth of Mode 1, D-A; the second, the same species of fifth, but now solmized in the hard hexachord, moving to the species of fifth and fourth of Mode 3 in the third and fourth brackets. This particular excerpt emphasizes an understanding of *Miserere mei Deus* in a melodic context of individual lines, of which the tenor is mode-determining. The A, common to both *maneriae*, serves as a turning point, but what is most important to

Aron are the characteristics of Mode 3. He never resorts to a notion of 'commixture', but the irregular ending points to the added emphasis given the pitch he identifies as the psalm-tone difference.[53]

Glarean described the motet thus:

> [T]his composition which Josquin des Prez has composed in five voices on the psalm, *Miserere mei, Deus*, has preference before all others. Its *Tenor Secundus* (as he calls it) has these three words, 'Miserere mei, Deus,' arranged with eight syllables to eight notes. However, because this song is in everyone's hands we shall not arrange its tenor in groups of eight, as he did, but in groups of three, so that the reader may observe both ascent and descent at a single glance (1547/1965:II,259-60).

His formulation of the tenor is shown in Example 2.28. Above is given the beginning of Josquin's tenor, from which he draws this example. As he described, Josquin's eight-note pattern is condensed, the rests and repeated notes removed to make the tenor motion obvious. The rhythm is purely schematic.

He continues:

> One truly sees here the Hypoaeolian from top *e* to bottom *E*; indeed divided arithmetically at *a*, on which it also ends...; however, a semitone has been added above, which really refers to the Aeolian, the principal mode of this one, but here its plagal *also* assumes it (1547/1965:II,260).

Even these brief statements represent quite a different interpretation from that of Aron. Glarean's concern with explaining the overall 'connectedness' of the work fits neatly into his 'hypoaeolian' category and his octave species orientation.

---

[53]As noted above, Aron uses the term *differentia* to refer to a particular concluding pitch, not to a formula for ending the psalms. That the term is not restricted to its liturgical meaning is clear from Aron's use of it to explain irregular endings in chansons. It should be equally clear that Aron's discussion with reference to *Miserere mei Deus* does not connect the irregular ending of the motet to its psalm text.

Compare his compression of the tenor ostinato with his illustration of the species of fourth and fifth in the hypoaeolian mode (at the bottom of Example 2.28)—he could not have found a better illustration if he had commissioned it specially.

Although Glarean 'invented' this modal category, it would be facile to argue that Aron simply did not possess such a category. The two theorists reveal in this example their entirely different understanding of what is significant: the ostinato tenor provides for Glarean an understanding of overall structure, focused on octave species, to which any 'phrygian' melodic implications are subservient. For Aron, from his traditional vantage point, *A la mi re* had a special role to play, but it could never function as final, and was unlikely to have even been imbued with the authority of a confinal.[54]

These two theorists, publishing treatises twenty years apart and in distinct national traditions, represent different viewpoints and one might argue that to compare the observations of Aron within the eight-mode system of classification and Glarean with his twelve-mode system is simply to compare different things. But their treatises share one crucial feature: both move in new directions with their references to composed polyphony. They represent individual viewpoints in their choice of music examples and it does not appear that these examples were chosen capriciously,

---

[54]Ironically, Glarean's twelve-mode classification scheme is often given precedence over Aron's because it recognizes the 'A' and 'C' modes. In the case of *Miserere mei Deus*, Glarean's classification removes the motet from the group of works with which it has closest tonal affinity. Aron's assessment of E as the 'final' of the motet and A as a pseudo-final has much to recommend it. Further on this, see Chapter 6.

but rather with care to supplement the content of the treatises.[55] Through a study of music examples and citations, it is possible to understand a 'sub-text' which goes hand in hand with explicit theoretical definitions of technical musical procedures. Too often in so-called historical analysis, this sub-text is ignored, and replaced by a concept limited to contemporary theoretical terminology, which more often than not takes that terminology out of context and fails to define adequately its function. If our purpose is to re-create sixteenth century theoretical views of this repertory, then Aron and Glarean are neither static, unhelpful, nor artificial in analysis, as one is often led to believe. Bergquist's description of Pietro Aron typifies this attitude:

> He was certainly in touch with what composers were doing, but his descriptions fall short of the complexities of practice.... A basic problem [is that] a linear concept is used to analyze music composed of several lines that move simultaneously and that constantly enter into vertical relationships with one another. The problem remains whether one thinks in terms of eight, twelve, or two modes. The system of 8 modes is less satisfactory for polyphony in its own terms than that of twelve modes, but neither considers the vital chordal factor. Despite all the apparatus Aaron invokes to determine the mode, he still ends by talking about individual lines only. It would be possible to do this for each line in the polyphonic complex, but this still analyzes line only, not chord, and any thorough study of tonal structure must include both. (1967:121)

Bergquist's solution was to adopt a Salzerian approach. The possibility that certain aspects of the musical structure of works from this period (most notably the

---

[55]Aron's citations seem to reflect the difficulty he encounters in attempting to assimilate monophonic modal precepts and polyphony. It is more than mere coincidence that Aron only uses music examples in the two most difficult areas he discusses: modal theory (*Trattato*) and application of ficta in practice (*Toscanello*). At these points, when his theoretical tradition is mute, he pragmatically resorts to citing compositions exhibiting traits for which it would appear he is unable to articulate a theory.

The music examples of Glarean's treatise have been the subject of much study although work along the lines of the approach to Aron's examples in this chapter has yet to be undertaken. See Schering (1911-12).

cadence) may be described with the same vocabulary in which procedures of tonality have been described is the basis for the evolutionary view of modality. The most persistent arguments for this perspective are seen in the writings of Edward Lowinsky (summarized in Lowinsky [1942 and 1962]). This perspective is also the basis of more extended Salzerian analyses. The most prolific advocate of this approach to the analysis of pre-baroque music and particularly music of the Josquin generation is Saul Novack (1970, 1976, 1977, 1983).[56]

Novack's discussion of *Miserere mei Deus* offers a stark contrast to Aron's and Glarean's descriptions of the motet. Example 2.29 is a reproduction of Novack's illustration of the tenor ostinato. This outline of the deployment of the 'Miserere' motive, as Novack labels it, is uncontroversial and it is easy to see that it parallels Glarean's reduction, to which Novack makes reference. On the other hand, from Novack's illustration of the 'tonal function' of the 'miserere' motive it would seem that his interest in Glarean's observation is as confirmation for his own perspective. Novack uses reductive graphs (reproduced in Example 2.30) to illustrate his view of the way in which the three large sections of the motet are related—how they build a tonally unified structure in which the Phrygian E in parts I and II is revealed to be the so-called 'dominant' of the 'true' final A.[57]

* * *

The contrasts of the three perspectives that I have presented in the final section of this chapter highlight the dilemma faced by the analyst of this repertory: at one extreme, there has been a tendency to argue for 'historical' analysis and the ideal of reconstructing a sixteenth-century perspective, yet forgetting careful examination

---

[56]Stern (1981 and 1990) followed closely in Novack's footsteps.

[57]See my graphs of *Miserere mei Deus* in Chapter 3 for a contrasting interpretation.

of the practical and philosophical considerations implied. The detailed examination of Aron's *Trattato* serves as a vivid reminder that sixteenth-century theory is a complex area of musical thought; music examples cited by theorists create an important sub-text which enriches and aids in the understanding of that theory and which merits further examination for the insights which it may give to an understanding of 'renaissance analysis'. To discover that such 'renaissance analysis' answers a completely different set of questions than those we might pose for strikingly different reasons follows from reading a theorist like Aron sympathetically rather than as a sort of phrase book for an analytical terminology. And working through the music 'his way' can re-focus the direction of our inquiry. At the other extreme, we find ourselves faced with analyses whose authors have embraced a particular theoretical system in an attempt to illustrate an evolutionary progression. Just as with Aron's modal categorizations, the analyses reflect theoretical preconception more than the actual music they address. While such non sixteenth-century analytical techniques have often been rejected on the basis of their modernity, it would seem more useful to evaluate such techniques for the insight they may provide—refining and modifying where necessary. It is such a synthesis of 'early' and 'modern' theory and analysis that I will take up in the next chapter.

CHAPTER 3

TOWARD A THEORY OF TONAL COHERENCE IN SACRED VOCAL POLYPHONY FROM ABOUT 1500: *UT / RE / MI* TONALITY AND MODAL TYPES[1]

Hexachordal theory underlies the conceptual framework used in this thesis for analyzing tonal coherence in Josquin's motets and leads to the collective nomenclature '*Ut / Re / Mi* tonality'. In this chapter, I will set forth general theoretical exposition of the significance of hexachordal theory, cadence, and modal types for tonal coherence. The theory I propose provides a designation for, and identifies the markers of, the tonalities represented in Josquin's motets. The discussion of cadence and modal types examines the way these tonalities operate in individual compositions and provides a backdrop for the more detailed discussions of the individual tonalities which follow in Chapters 4 to 6.

Ut / Re / Mi Tonality: Background

The Guidonian diatonic relates at a basic level areas of thought like modal and contrapuntal theory that were essentially distinct in the minds of fifteenth- and sixteenth-century theorists but intimately intertwined in polyphonic composition. The hexachordal position (*vox*) of the final and melodic characteristics described by solmization syllables associated with it correspond to modal markers. In Josquin's motets, such melodic characteristics are consistently evident in the superius in addition to or in place of the tenor. Linking these with contrapuntal and registral conventions of a vocal ensemble suggests three basic tonal systems, which may be

[1]An earlier version of portions of this chapter was published in Judd (1992b)

identified by hexachordal nomenclature as *Ut, Re,* and *Mi* tonalities. I arrived at these tonalities through detailed study of Josquin's motets, recognition of the parallels between them and the works Aron cited, and what I perceived to be the incongruities of the modal categorization of Josquin's motets in Table 2.4. However, two comments by Glarean underline the essentially practical basis of these tonal systems in the same way that the excerpts cited by Burtius and Cochlaeus in Chapter 2 suggested an awareness of the distinction of how modes were recognized in practice. First, in the context of the eight traditional modes Glarean says:

> The same men teach in this way concerning the ending of songs in all modes: Every song ends either on *re* or on *mi* or on *ut* (1547/1965:I,70).

When he introduces his twelve modes he adds:

> [Many learned men of this day] are acquainted with only eight modes, and others proclaim that three, *ut, re, mi,* are sufficient, just as ordinary players use them. (1547/1965:I,103)[2]

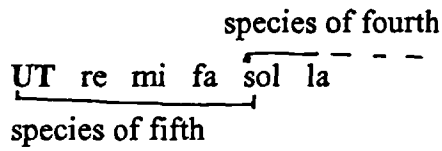
The position of the final relative to the hexachord corresponds to governing melodic features; in essence the function and thus the 'tonality' of a final reflects its place in the hexachord, as illustrated by Figure 3.1.

---

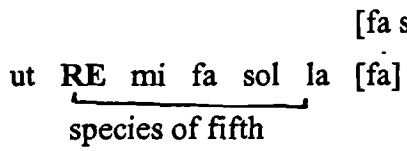
[2]I am grateful to Professor Harold Powers for drawing to my attention two additional passages in the *Dodecachordon* that also hint at this idea: 'especially since even now we have commonly only three modes in frequent use' (:I,115) and 'singers of our time place every *ut* according to this mode [Ionian], likewise every *re* to the Dorian and *mi* to the Phrygian, recognizing no *ut* other than that of this mode' (:I,154).

Figure 3.1: Hexachordal position of Final

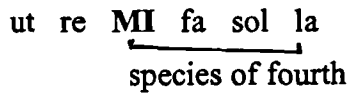
Ut: the full hexachord is available; it contains the characteristic species of fifth and has implications for the upper species of fourth.



Re: the final and upper boundary of the hexachord emphasize the species of fifth, *re-la*, and lead to frequent but not obligatory use of *fa super la*.



Mi: the final and boundary of the hexachord emphasize the *mi-la* fourth.



Unlike modal theory, a study of tonal coherence in this repertory raises the question not only of the focus of melodic patterns as described by solmization syllables, but the interaction of such patterns in counterpoint. The introduction of contrapuntal elements leads to the topic of cadence. Lowinsky's thesis that the 'cadence is the cradle of tonality' (1962:4) evoked a wide range of responses, many of which concentrated on his emphasis of 'root motion by fifth' in the bassus. Crocker (1962), Randel (1971) and others demonstrated that such bassus motion is the

inevitable response to a basic two voice (superius-tenor) contrapuntal framework. Lowinsky's use of the term 'tonality' falls within the domain of what Dahlhaus labels more explicitly 'harmonic tonality': 'the representation of a key by means of associations among chords related to a center—a tonic triad' (1968/1990:18). Dahlhaus makes a critical distinction between such 'harmonic' tonality and 'melodic' tonality in which a hierarchical relationship among pitches does not rely on a chordal context for comprehension and he equates 'melodic' tonality with 'modality'. However, Crocker's (1990:146ff) discussion of chant following Claire (1975) illustrates that 'melodic' tonality and modality are not synonymous.[3]

Even with modification to encompass Crocker's view, Dahlhaus's binary opposition of harmonic versus melodic tonality poses an apparently insurmountable obstacle for study of this repertory. His purpose was markedly different from the present one: his studies focused on the 'origins of harmonic tonality' and he demonstrated conclusively that selected motets by Josquin did not meet his criteria of harmonic tonality. I would counter that the opposition of melodic and harmonic is particularly inappropriate for this repertory and argue instead in favour of the concept of 'polyphonic' tonality,[4] a specific manifestation of which I have identified as *Ut / Re / Mi* tonality.[5] In counterpoint, the emphasis of recurring interval patterns, especially those which result from the combination of the melodic formulas that characterize cadences, leads to focus on specific pitches within a pitch set, which may or may not

---

[3]Crocker argues that the notes on which a chant dwells are a more useful basis for the analysis of melodic organization than the note on which it ends (which was the basis of classification in the modal system). Crocker uses pitch sets identified by solmization syllables, associating the focus of the chant with a particular pitch set, e.g., *ut-re-fa*.

[4]I have no desire to coin the term 'polyphonic tonality', only to make here a distinction from (later) harmonic tonality.

[5]The claims I make for *Ut /Re / Mi* tonality in this thesis are within a restricted chronological frame, that at its broadest may be construed as 1470 - 1530.

coincide with melodic pitch sets of individual lines. Thus, the ordering and recurrence of cadential pitches contributes to the establishment of the polyphonic tonality, and need not necessarily reflect melodic modal conventions.[6] This conclusion does not require Lowinsky's evolutionary link of cadence and triadic tonality, but goes beyond Dahlhaus's melodic tonality and intervallic successions.

Cadence

The general definition of cadence in Tinctoris (1473/74) remains useful: 'Cadence is a small part of any part of a song at the end of which is found either general repose or perfection'[7]. Aron's more explicit formulations provide a background for the way cadence is discussed in this thesis.[8] Aron (1516) describes the construction of cadences in Book 3, chapters 35-51. Aron describes the typical two-voice formulas illustrated in Example 3.1 with solmization syllables of the superius formula and interval relation with the tenor; cadences are distinguished as single and double, that is without and with a suspension respectively, and always consist of a three-interval pattern. (There are no printed music examples in the *Institutione*.) Following this discussion, Aron goes on to enumerate superius cadences for each note of the hexachord. When these patterns are extended to composition in four parts, the bassus is described in relation to the tenor, and then the

---

[6]As Chapter 2 demonstrated, studies such as Perkins (1973) which link cadence and mode in a symbiotic relationship in the first quarter of the sixteenth century are problematic.

[7]'Clausula est cuiuslibet partis cantus particula. in fine cuius vel quies generalis vel perfectio reperitur' ([1473/74] cited and translated in Berger [1987:129]). As Schmalzriedt (1974a:5) demonstrated, the Latin terms *clausula* and *cadentia* begin to be used synonymously around 1500, so that Vanneo repeats Tinctoris' definition, substituting *cadentia* for *clausula*: 'Cadentia igitur est cuiuslibet partis cantus particula, in fine cuius uel quies generalis, uel perfectio reperitur' (*Recanetum de musica aurea* [1533], cited by Schmalzriedt [1974b:3]). Similarly, the Italian *cadenza* is used in the same sense in vernacular treatises like Aron's *Toscanello*.

[8]I follow Aron's terms *cadentia* and *cadenza* by using 'cadence' rather than 'clausula'.

altus is described in relation to the bassus, resulting in the counterpoint shown in Example 3.2. Aron notes later that the bassus must be treated differently when the tenor would approach its final by semitone (a *mi* cadence), and takes over the part the tenor would normally sing. In the *Toscanello* (1523) Aron suggested a different solution; both are given in Example 3.3. Aron also allows cadences to the unison if the normal sixth-octave motion extends the tenor below its range (Example 3.4). Apart from the exchange of function between tenor and bassus in the first cadence of Example 3.3, Aron gives no indication that the melodic patterns of individual voices may be moved among voices (in the third-unison cadence just cited, the tenor is above the superius). These basic tenets, demonstrated with descriptions of cadences to each final, are the essence of Aron's cadential theory.[9] From the writings of other theorists it becomes clear that variations of the patterns described by Aron were also routinely accepted. For example, Koswick provides an illustration in which he describes the tenor and superius exchanging function, and then describes the bassus motion, like Aron, in relation to the tenor (see example 3.5).[10]

A further example by Cochlaeus, shown in Example 3.6, allows the altus to take over the superius function, while the bassus and tenor of the original cadence remain. Rivera used this example to argue that

> one no longer finds a dyadic nucleus; no two voices are on hand to provide the conventional third-to-unison or sixth-to-octave cadence. The explanation for such an "anomaly" can only lie in the composer's apparent determination to achieve complete triadic sonorities at the expense of "proper" intervallic progressions. The [superius] had to conclude on the third rather than on the tonic, precisely in order to produce a complete triad. It would seem, therefore, that to the extent

---

[9]For a thorough summary of Aron's writing on counterpoint and cadence, see Bergquist (1964:315-87, esp. 363-75).

[10]Koswick's text and example are cited in Rivera (1979:83).

> that one could speak formerly of a theory of intervallic progression, one can now speak of a quasi-embryonic theory of triadic progression (1979:84).

While the bassus progression to the final has gained added significance, there does still seem to be a dyadic basis for the cadence—the tenor and bassus are the two unchanging voices in Cochlaeus' example—which suggests ways in which the two-voice progression may be altered (weakened, strengthened) and in which the dyadic pair may move through the polyphonic texture.[11] These small examples point to the manner in which cadential procedure may be manipulated and the apparent freedom with which exceptions to the general superius-tenor, sixth-octave premise may be made.

As Meier suggested, 'the basic definition of the cadence in the sixteenth century aims at stylistic, not tonal, functions' (1974/1988:89). It is only through an examination of how those stylistic functions operate in practice that conclusions about tonal function may be drawn. The view of cadence I propose is that of a general melodic and contrapuntal formula with a set of variables that include the cadence tone, the interval progression, the voices carrying the interval progression, the addition of the bassus pattern, and rhythmic (suspension) and melodic (e.g. 'under third') ornamentation. Added to these are textual and textural punctuation, the use of caesuras for closure, etc. Associations with cadential treatment also influenced the treatment of octaves and unisons in counterpoint.[12] The choice of cadence tone, voicing, and so forth, all combine to delineate a hierarchy of patterns within an individual composition, an ordering which suggests the syntagmatic grammar of an individual work. Generalized formulations of cadential hierarchy quickly become

---

[11]See for example the cadential reduction proposed in Judd (1985:218).

[12]See Dill (1982).

convoluted. Urquhart (1982) attempted to 'weight' cadences as the basis for a computerized statistical analysis of cadential frequency.[13] Krantz (1989:112-114) suggested a 'continuum ranging from strong terminal cadences to weak and transient quasi-cadential articulations' and provided a thorough list of factors that influence the relative strength and weakness of a cadence, but did not articulate a method of interpreting those factors: following a perceptive discussion, he opted to study the 'relationship of the focal pitch of the cadence to the mode', turning primarily to the evidence of later theorists Vanneus, Angelo de Picitono, Zarlino, Dressler, Aiguino, and Pontio (:116-129). Berger (1987:122-154) provided a more thorough overview of cadential theory and distinguished a cadence from any imperfect to perfect interval succession by the following criteria: a cadence 1) signifies closure either of the whole or a part; 2) is analogous to verbal punctuation and may reflect textual articulation; 3) may involve a following rest; 4) includes the octave (or its equivalent) as an indispensable part of the final harmony; 5) should conclude at the beginning of a larger mensuration unit; and 6) may be 'evaded' or 'interrupted'. Berger concluded that:

> the borderline between cadential and non-cadential imperfect-to-perfect progressions may be somewhat blurred. A progression may exhibit some, but not all, of the characteristic features of a cadence (1987:138).[14]

---

[13]He assigned a 'weight number' on the following basis, weighted 1 to 4 respectively: 1) one of the two cadence-defining voices comes to a halt, regardless of the activity of the other voices; 2) both of the cadential voices stop, again regardless of the activity of the other voices; 3) all voices stop before the motion resumes; and 4) ends of a sections of a motet. 'If neither of the two cadencing voices stops, the cadence is not recorded, even though it might have been prepared and executed with as much clarity as any other cadence' (1982:13).

[14]Berger's purpose, an exploration of accidental inflection, is quite different than that of the present thesis, and stated clearly in his next sentence:

> While some progressions are certainly cadences and others certainly are not, there is a gray area in between in which a decision has to be made (by the composer,

Berger applies his criteria in order to answer the question of accidental inflection, but the same criteria may be used to discuss cadential hierarchy in the service of formal and tonal relationships.

Meier (1974/1988) adopted four terms from seventeenth century theory to describe the function of individual voices in a cadence: *cantizans*, *altizans*, *tenorizans*, and *basizans*. These terms identify the idealized role played by any voice in the intervallic succession of a cadence. That is, the *cantizans* describes the function which theorists ascribed to the superius: rising by step to the final; the *tenorizans* refers to the voice which descends by step, and so forth. The two basic categories that Aron distinguished are described in Meier's terminology as 'formal' (with a syncopated suspension) and 'simple' (without the suspension formula). The final cadence of the *prima pars* of *Salve regina* (Example 3.7) is a good example of those roles.

Example 3.8 gives the cadences to the final which mark the major textual divisions in *Salve regina*. The annotations on the example refer to a gradual intensification in the cadential procedure. The similar three-part voicing and the stronger formal cadence at the end of verse 2 (b. 38) creates a grouping of the first and second verses. The extension of the final cadence in the *secunda pars* (b. 175) uses the standard bassus for prolonging a final cadence. Cadential procedure reinforces Josquin's elision of verses 7-9. A cadence to the final marks only verse 6, near the midpoint of the *tertia pars*, and the concluding cadence of the motet employs the ostinato-bearing quinta vox in a structural role. Not surprisingly, the cadences

---

performer or editor) as to whether a given progression should be treated as a cadence and properly inflected, or left intact. (1987:138).

which conclude each *partes* use the strongest voicing and are reinforced by textural and durational processes.[15]

The pitches on which cadences are focused and the way in which they are ordered and reiterated are equally fundamental. In Appendices 2 and 3, I have provided a table of the cadential profile of each of the motets discussed in this thesis. In addition to the pitch of the cadence, those tables identify the stylistic features described above and adapt Meier's terminology to indicate the function of a voice in the interval progression (*cantizans*, etc.) and 'structural' cadences in which a single pair of voices appears to be responsible for the most prominent cadences in a work. Additionally, major textural and textual segments are indicated on these tables. A single example—*Ecce maria genuit*, the final motet of the *O admirabile commercium* cycle (*Werken* 9)—will illustrate the way in which such cadential profiles relate to tonal coherence.[16]

---

[15]See Judd (1992a) for a more detailed discussion of cadential procedure in *Salve regina*. It would be possible to produce a catalogue of sorts of the types of stylistic cadential variants Josquin employs. Appendix 1 contains such a catalogue, just for the five motets of the *O admirabile commercium* cycle. As Appendix 1 suggests, the range of variables approaches the infinite. To extend such a catalogue to all of Josquin's motets would ultimately be unwieldy, as well as unprofitable. For such a 'comprehensive' catalogue of cadence types in Josquin's motets, see Judd 'Cadential Structure and Articulation in Josquin's Four-Voice Motets' (unpublished paper read at the Conference on Medieval and Renaissance Music, Nottingham, 1985). It is only when stylistic variants are placed in the context of an individual work that some sense of cadential hierarchy may be perceived. Further, the use of texture, rhythmic motion, and repetition--in a sense unquantifiable outside the context of an individual work--act as the agents of closure in conjunction with (and in place of) stereotypical cadential motion, as indicated by the further examples from *O admirabile commercium* in Appendix 1.

[16]The cadential profiles of the other *O admirabile commercium* motets are discussed in Chapter 4.

Table 3.1: *Ecce maria genuit*, Cadential profile.

Text incipit[a]	Bar	Cadence tone[b]	Type	Cantizans	Tenorizans	Basizans	Other[c]
Ecce	9	D	S⌉	S	A		
	12	D[d]	S|	T	S		
	16	G	S⌋	B	T		
genuit	18	G	F	A	S		
	20	D/F					SA
	22	G/B[b]					TA
	24	D	F	A	B		
quem	32	D/A					SB
exclamavit	36	G[e]	F	S	A		
	41	D	Fu3⌉	T	B		
Ecce	44	D[d]	Fu3|	S	A		
	47	G	Fu3|	B	T		
ecce	52	D	Fu3|	A	S		
	57	D	Fu3⌋	T	B		
(alleluia)	60	D/A					SB
	63	C[f]	F	S	A		
	66	D	F	T	B		A
	69	D/F/A					SAB
	72	G	S	S	T	B	A

[a] The full text of the motet is: Ecce Maria genuit nobis Salvatorem, quem Joannes videns ex clamavit dicens: ecce agnus Dei, ecce qui tollit peccata mundi. Alleluia.

[b] When a cadence lacks the stereotypical motion to the octave or unison and is replaced by a simple caesura that nevertheless clearly marks textual or textural division, the pitches of the concluding voices (usually an interval of a third and/or fifth) are given.

[c] Voices participating in a cadence lacking the defining melodic pattern of *cantizans*, etc. are listed here.

[d] Over G in Bassus.

[e] Over E-flat in Bassus.

[f] Over A in Tenor.

The treatment of phrases beginning with the word 'ecce (behold)' reflects textual priorities. Each moves from cadences on D to cadences on G. Interior phrase divisions are less strongly marked, but uniformly cadence on D. Under-third cadences set off the central exclamation: 'Ecce agnus Dei, ecce qui tollit peccata mundi', illustrating the manner in which stylistic variants may serve formal purposes. The opening of this section is further marked by triple mensuration. The following 'ecce' coincides with the return to duple mensuration. All three of the cadences in the first section of the motet are simple cadences, as is the final one. The addition of basizans motion is reserved for the final cadence, which uses the stereotypical, 'strongest' voice distribution of cadential function. As Figure 3.2 illustrates, the motet relies on a framework of voice pairs reflected in the cadential profile, which also reflects the intimate relationship of form and texture. The cadential parallels of the outer section coincide with a similar use of voice pairs. The inner section adds a use of recurring contrapuntal pairs through the repetition of an accompanying motive—in the altus for 'genuit nobis salvatorem', in the superius for 'quem Johannes videns', and back in the altus for 'exclamavit dicens'. The form of the motet at the local level mirrors that of the large scale, with related textural and tonal material framing contrasting sections:

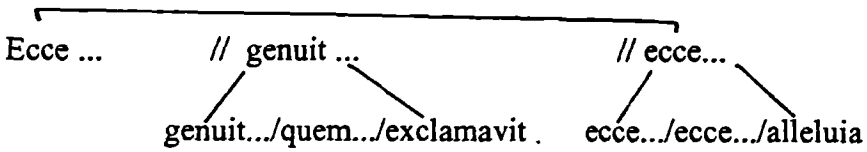
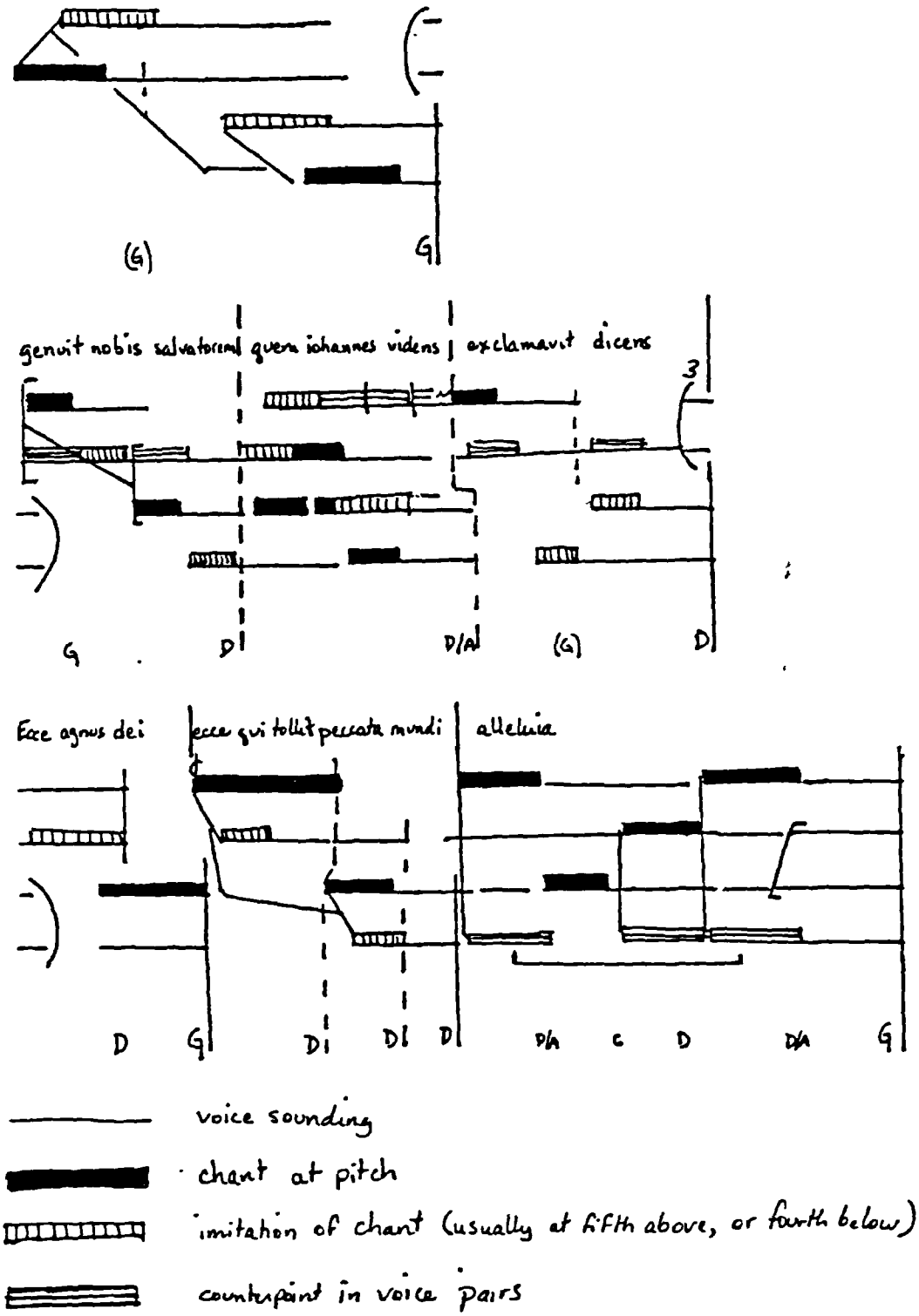


Figure 3.2: ***Ecce maria*, Textural graph**



Modal types

I have pointed thus far to the conceptual tonal framework of the Guidonian diatonic and *Ut / Re / Mi* tonality and identified stylized cadential procedures which contribute to formal and tonal hierarchies of polyphony. The discussion of cadence suggests the next stage in studying tonal coherence which is more directly tied to processive analytical criteria. Josquin's motets exhibit recurring patterns of superius, tenor, bassus, and less strictly altus, in a schematic texture within each tonality; these schemata grow out of the two-part imitative-cadential framework described above and registral constraints of the vocal ensemble. Of the seventy-one motets considered in this study, twenty are for five or six voices, and the extension of the ensemble relies on one of three compositional devices: 1) a tenor of contrasting text and cantus firmus,[17] 2) an ostinato or 'motto' scaffolding device,[18] or 3) a chant melody set canonically in long note values.[19] The single motet which does not fall into this scheme is a psalm motet transmitted only in late sources: *Cantate Domino canticum novum*.[20]

---

[17]Usually the combination is a preces and antiphon or a newly composed humanistic text and antiphon, *viz.*, *Virgo salutiferi / Ave Maria*, *O virgo prudentissima / Beata mater*, *Christus mortuus est pro nobis / Circumdederunt me*, *Sic Deus dilexit mundum / Circumdederunt me*, *Huc me sydereo / Plangent eum*, *Ave nobilissima creatura / Benedicta tu*, and from the burial service *Absolve, quaesumus, Domine / Requiem*. One motet, *Stabat mater dolorosa / Comme femme desconfortée*, combines a sequence text with the tenor of a Binchois chanson. On the authenticity of the two motets using the *Circumdederunt* tenor, see Milsom (1982).

[18]As in *Miserere mei Deus*, *Domine Dominus noster*, *Salve regina*, and *Illibata Dei virgo nutrix*, all for five voices.

[19]As in *Pater noster* (*secunda pars* = *Ave maria*), *De profundis*, *Benedicta es*, *Homo quidam fecit coenam magnam*, and *Inviolata integra et casta es, Maria*. The freer treatment of *O virgo virginum* and *Praeter rerum*, using the chant in long note values primarily in superius and tenor, but not in strict canon, extends this technique.

[20]Finscher first challenged the authenticity of this motet. See chapter 8.

I will use the term 'modal type' to designate melodic-contrapuntal paradigms that represent the tonal schemata of Josquin's motets. A tonality and its modal type(s) as manifested in an individual work are identified by two markers: the tonal / hexachordal function of the final and its location, e.g. *Re(D)*; and a characteristic melodic shape indicated by solmization syllables, e.g. *re-la*. The pitch (*littera*) of a final is connected with its function (*vox*) and used as a subsidiary identifier; the characteristic melodic framework described with solmization syllables is further refined with a notational representation of a contrapuntal profile.

Each of the *Ut*, *Re*, and *Mi* tonalities consists of, and is defined by, a distinct collection of modal types. The various modal types reflect registral constraints that are in many cases consistent with authentic / plagal distinctions, but modal types are not limited to those that may be directly related to modal theory, nor does their distribution reflect traditional eight-mode theory. I use the term 'modal type' neither as a synonym for, nor to describe compositional representation of, 'mode'. A modal type defines polyphonic tonal coherence and may correspond to features commonly called modal indicators. Those features are precisely the ones that are described numerous times in solmization terms in elementary treatises and chant manuals that have more to do with the practicalities of chanting and singing polyphony than learned modal theories. As suggested in Chapter 2, it is unlikely that Josquin thought of himself as composing polyphony 'in the modes' in the sense of later composers who published modal cycles; but his music, like that of other composers of sacred music around 1500, was grounded in plainchant. His melodic figures are frequent enough to be common currency and are easily described by reference to modal terminology. The paradigm of a modal type addresses the polyphonic relationship of voices, not just the melodic structure of individual lines, and particularly that of the tenor, which directly concerns modal theory.

Example 3.9 shows a sampling of modal types in relation to the three tonalities I propose. The notational conventions I employ to represent modal types reflect Schenkerian principles in the use of reductive representations of a structural voice-leading framework and hierarchical notation, but that is as far as the comparison with a Schenkerian analysis should be taken. The bassus shown in such paradigms is a complement of a structural superius-tenor relationship, the result of the contrapuntal and registral conventions of the vocal ensemble, and not a structural determinant: it is generated as part of the counterpoint rather than a harmonic force that directs and shapes that counterpoint.[21] Nevertheless, as an outer voice of the texture, like the superius, it takes on more significance and particular patterns are associated with it; this is especially true of registral conventions and cadential patterns. In Example 3.9, stemmed notes belong to an abstract paradigm, and unstemmed notes reflect the specificity of an individual motet. Not surprisingly, the

---

[21]The contrast should be obvious with Stern (1981 and 1990). Influenced by Novack's neo-Schenkerian analyses, Stern makes the following proposal:

> Significant ways in which the individual modes use the fifth on a large scale, and the resulting tonal structures, will be examined in this study. The large-scale use of the fifth in modal polyphony gives rise to various types of tonal organization. Four main possibilities are outlined here. The first shows a close connection with music of the major-minor era: the use of a large-scale I-V-I (tonic-upper fifth-tonic) arpeggiation. In music of the Renaissance, this arpeggiation may govern an entire work or section of a work. The second possibility is the use of a series of I-V-I arpeggiations of a more local natures; this arises from the characteristic melodic motion between boundary tones of the modal fourth and fifth species. The third category is comprised of the large number of Renaissance compositions which end on the dominant.... The fourth category also shows a considerable difference from later tonal practice: the I-IV-I (tonic-lower fifth-tonic) progression is sometimes used as a basis for large-scale organization during the Renaissance. Thus it is apparent that modal polyphony shows a greater flexibility in using the bass intervals of the fourth and fifth than does the music of the major-minor era (1981).

The perspective I suggest here also differs fundamentally from Krantz (1989). Although Krantz employs reductive graphic techniques, he limits such reductions to single voices graphed separately. Structural pitches (open notes in his graphs) are pre-determined by modal theory: 'the extremes of structural intervals such as the modal diapente and the repercussio' (·I,157).

conventions associated with many modal types are quite at odds with models associated with major-minor tonality, but they should not be viewed as substitute 'modal backgrounds', or necessarily a 'background' in any sense; the lower voice should not be read as engendering and prolonging a harmonic entity.

* * *

A full explanation of *Ut / Re / Mi* Tonality is the subject of chapters 4 to 6. The remainder of this chapter will focus on one aspect of these tonalities: the ways that modal types act as units responsible for tonal coherence in individual works. Durational and formal considerations distinguish three general categories of use from the small-scale to the large; these are indicated for the modal types illustrated in Example 3.9:

1. Simple
    a. note-against-note counterpoint
    b. slight elaboration
    c. formal unit
2. Sectionalized elaboration
    a. patterned repetition
    b. regular alternation of two (or more) modal types
3. Level of *pars* or entire motet.

These categories are not mutually exclusive, and theoretically any modal type might represent any of the categories listed. It also follows that an individual work may use a modal type in more than one category, but rarely, if ever, all. Modal types correspond most closely to features identified by so-called 'modal analyses' at the level of simple counterpoint: the identification of species, and so forth. Example 3.10 provides an example of simple counterpoint displaying the characteristics of a

modal type on a local level, which almost always coincides with cadential formulations. The cadence on the final is a formal cadence between tenor and superius; the superius outlines the *la-re* fifth; the tenor outlines an octave; the alto fulfills the basizans function.

Recognition of a modal type in the formal context of what later theorists were to describe as the *exordium* is also usually straightforward. Example 3.11 illustrates the *Re:re-fa* modal type that is associated with the opening of two motets: *Qui habitat in adjutorio* (*Werken* 31) and *Memor esto verbi tui* (*Werken* 52). At a similar 'level' durationally, *Salve regina* demonstrates the same type of structural patterning in an interior verse. Registral connections in the superius reproduce the contrapuntal paradigm of Example 3.12 at a larger scale.

Sectionalized elaboration of the modal type often corresponds with text form as Example 3.11 and 3.12 demonstrate. In an extension of this procedure, a series of repeated modal types may delineate the form of a piece. A striking illustration of this type of repetitive patterning as a form-building and pitch-structuring device may be seen in the psalm motet *Dominus regnavit* (*Werken* 65) (see Example 3.13). This motet, frequently cited for its paired signatures (Meier [1982] and Dahlhaus [1968/1990]), was listed as mode 6 in Table 2.4. It was exceptional in that category, both for its signature configuration and its lack of cantus firmus. Meier argued that the work should be described as transposed Mode 8, with mixture that used the final shared with Mode 6. He postulated that the regularity of *Dominus regnavit* pointed to the eighth psalm tone, shown in his transposition in Example 3.13a, but he described the relationship as 'hidden' or 'intangible'. A distributional analysis of the *prima pars* in Example 3.13b illustrates the gradual melodic expansion that is responsible for the motet's dynamic shape. The extract to the left of this table shows how the melodic expansion of the modal type is accomplished and the nature of the

substitution, prepared by the altered ordering of paradigms in verse 3. Example 3.13c graphs the working out of the superius of *Dominus regnavit.* The modal type is shown in Example 3.13d. The modal type is a basic unit: restatements, varied or not, of that unit create the musical shape and meaning of the motet. Example 3.13c aligns the features that led Meier to assert the modal connection of Modes 6 and 8. Although emphasis on the fourth *ut-fa* is normally associated with mode 8, its use in works that a sixteenth-century theorist could classify only as Mode 6 is apparent in Aron's examples,[22] and a modal type like that associated with *Dominus regnavit*, that is, *ut-fa / sol*, is common in *Ut* tonalities whether based on F or G.[23] Such patterning is not limited to that determined by text or chant structure.[24]

The grouping together of two modal types from a single tonality is another manifestation of sectionalized elaboration of the modal type. The excerpt from *Gaude virgo mater Christi* (*Werken* 23) in Example 3.14 illustrates this procedure in the last two three-line strophes and alleluia of the sequence text. Again, the use of modal type corresponds to text form; the first two lines of the verse emphasize the *la* of the *re-la* type through the elaboration of a^1 by the a^1-e^2, *re-la* fifth. This moves to

---

[22]See especially Stokem, 'Brunette' (*Odhecaton* 5) and Compère, 'Vostre bargeronette' (*Odhecaton* 41).

[23]See Chapter 5.

[24]See the discussion of this motet in Chapter 8. The motets with the most regular recurrent patterns of modal type of the sort demonstrated by *Dominus regnavit* generally do not stem from entirely reliable source traditions. Repetition of a modal type over the whole of a motet differs from a more local phenomenon that Joshua Rifkin (1990) described as 'motivicity'. (I am grateful to Mr. Rifkin for a typescript of this paper.) In almost every instance, such motivic saturation in either an imitative or chordal context is in the service of some higher-level working out of a modal type. 'Motivicity' is especially characteristic of five- and six-voice textures, but also occurs in four-voice works, and is similar in effect to another technique found frequently in the four-voice motets: immediate and extensive literal repetition of a two or three note figure in graphic textural and tonal contrast to the material which surrounds it.

the *re-fa* modal type for the last line of the verse. The concluding 'alleluia' uses the same pattern, that is, *re-la* to *re-fa*. The modal type summarizes this.

The extension of a modal type as a compositional determinant at higher levels, extending to that of the *pars* and entire motet, relies on a confluence of three factors: contrapuntal-cadential support, local centers of tonal focus, and registral emphasis and connection. A single modal type may ultimately control tonal coherence when these factors are used to extend individual elements of the modal type.

Excerpts from the psalm compilation *Domine, ne projicias me* (*Werken* 64) illustrate the procedures for extending a modal type. The final cadential descent emphasizes the structural role of the modal type through coincidence of cadential and tonal structure. As shown by the annotations in Example 3.15a, each of the structural, that is, stemmed, notes of the modal type coincides with cadential patterning. Example 3.15b shows changes of local tonal focus in the opening of *Domine, ne projicias me.* Annotations on the score indicate the shift from *mi* to *re.* The special role played by *A la mi re* in this motet should be noted. This pitch facilitates local changes of tonal focus that have sometimes been described as 'modal excursions' and loosely-linked to text-expressive purposes (e.g. Meier 1956). As a boundary of the first species of fifth and the repercussion of Mode 4, A acts as a turning point between *D re* and *E mi* orientations. Nevertheless, the partial reduction of the *prima pars* in Example 3.15c illustrates that these changes of tonal focus are subservient to and connected with the structure shown in Example 3.15d: in effect, a^1 is extended in the superius until its connection to c^2 in bar 30. This type of extension is most frequently applied to the boundary pitches of a modal type.

The *Mi(E):mi-fa* modal type operates at the highest level: the conclusion of the *prima pars* creates a registral connection across the two parts of the motet,

illustrated by the excerpts graphed in Example 3.15e. Again, it is important to note the practical role of A, this time in the bassus of the *mi-fa* modal type. This modal type and that of Josquin's *Miserere mei Deus* (*Werken* 37, Lowinsky, *Medici*, 41) share essential similarities. Example 3.16 gives the conclusion of *Miserere mei Deus* and its modal type. As described in Chapter 2, both Aron and Glarean cited A as the final of this motet and made differing modal assignments on that basis,[25] but the modal type is clear, its conclusion reinforced by the unusual crossing of tenor 1 and superius. *Domine, ne projicias me* and *Miserere mei Deus* conclude on different final sonorities, but this is a secondary distinction: both represent common compositional responses to the *mi-fa* melodic paradigm of the *Mi(E)* tonality.

Two final examples conclude the illustration of modal types operative over large spans of music: *Miserere mei Deus* and the *tertia pars* of *Salve regina* (see Examples 3.17 and 3.18).[26] Both are five-voice motets which use an ostinato as a scaffolding device: the 'miserere' refrain of the tenor secundus in *Miserere mei Deus*; and the first four notes of the antiphon melody in the quinta vox of *Salve regina*.[27] They are, however, of manifestly different tonalities. *Salve regina* paraphrases a Mode 1 antiphon.[28] The paraphrased cantus firmus appears in the superius in the *prima* and *secunda partes*, but at the opening of the *tertia pars* migrates to the bassus. The migration occurs when the chant reaches its lowest registral point. Moving the

---

[25]Aron assigned it to Mode 3, Glarean to the Hypoaeolian mode.

[26]For extended discussion of these motets, see Macey (1985) on *Miserere mei Deus* and Judd (1992a) on *Salve regina*.

[27]Large-scale ordering is not necessarily the function of an ostinato; see the discussion of *Illibata Dei virgo nutrix* in Chapter 4.

[28]The paraphrase is described in Sparks (1963:393) and its structural role explored in Judd (1992a). Krantz (1989:201) apparently did not observe the paraphrase, stating that the antiphon 'contributes only its opening motive (A-G-A-D) to this motet'.

chant paraphrase to the bassus maintains the registral connections of the superius across the *secunda* and *tertia partes*. The range of the superius would have allowed the chant to continue in that voice and the migration signifies not only the gradual freeing of the paraphrase in the *tertia pars* but also the structural importance of the modal type. The sustained descent to the final (bs 165-end) reiterates the registral connection of d^2 across the *tertia pars* with an extensive working out of the fifth (see the reductive graph of Example 3.17).

The abstract modal type given in Example 3.17 does not imply a procedure analogous to 'functional tonality'. A neo-Schenkerian graph of this motet would probably highlight similar pitches, though attributing to them a different significance.[29] Such a coincidence reflects particular features of this modal type; and, on the whole, Schenkerian-type analyses have been most successful with the class of *Ut* and *Re* works that use large-scale connections of the modal type.[30]

The reductive analyses of *Miserere mei Deus*, a *Mi* motet (see Example 3.18) illustrate the divergence of the approach advocated here from the neo-Schenkerian. The 'Miserere' ostinato operates independently of the modal type. In the *prima pars*, the establishment of the boundary pitch of the modal type in the superius (c^2, b. 19) coincides with the first statement of the ostinato. In the opening of the *secunda* and *tertia partes*, however, the two are independent of one another; the two procedures operate distinctly. The modal type governs the tonal structure and the ostinato is

---

[29]That is, the melodic materials associated with *Re(G):re-la* in counterpoint result in sonorities that might be described in tonal terminology as tonic and dominant triads and the registral connections might then be construed as Schenkerian prolongations.

[30]This can be seen in the analyses by Novack (1970, 1976, 1983) and Stern (1981, 1990). My own earlier analysis of *Ave Maria ... virgo serena* (Judd 1985) also aptly illustrates this. Krantz (1989:154) provides a useful summary of the problems inherent in linking the modal *repercussio* and Schenkerian primary tone.

connected with articulation of text form; at points of particular significance, the two procedures coincide. The bracketed areas on the analysis indicate motivicity and repetition. Plus signs mark ostinato entries and the graph of the *tertia pars* is given at two levels of reduction; the second level of reduction shows most clearly the role of the modal type.

A comparison of this analysis with Novack's (1970: Graph 40, reproduced in Example 3.19) will throw the differences of modal types and Schenkerian backgrounds into relief. His analysis interprets the downward fifth motion of the ostinato, in conjunction with the bass motion, as establishing a fifth descent in A minor; some unexpected relationships are ascribed to early tonal practice. That Novack's analysis relies so heavily on the tenor ostinato for explaining the motet's overall pitch structure as well as textual articulation seems to go against the very virtuosity with which Josquin handles such ostinati and scaffolding devices. In addition, significant registral and cadential connections are ignored by Novack's analysis. Far greater difficulties would be encountered in an analysis of the first and second parts of *Miserere mei Deus* with reference to an exclusively tonal model; Novack only provides a voice-leading analysis of the *tertia pars*.[31]

* * *

I do not wish to suggest in the continuum I have described from small to large-scale ordering a chronological or developmental progression. It might be possible to read my categories of modal types as 'culminating' in large-scale tonal elaboration, and to move from that assumption to an evolutionary view which

---

[31]Other works that readily demonstrate similar play of form, structure and ostinato/cantus firmus include *Salve regina*, *Missa Hercules dux Ferrariae* and *Huc me sydereo*. On *Salve regina* and *Missa Hercules dux Ferrariae*, see Judd (1992a); see Chapter 6 on *Huc me sydereo*.

preferences a relatively small group of motets as the foundation of an 'emerging' tonality. Musical and contextual evidence will not support such a conclusion, however. Chapters 4 to 6 repeatedly bring to the fore the intricate interrelationship of text, functional associations, genre, pre-existing material, formal and tonal organization. The works discussed in Chapters 7 and 8 illustrate a reception-history that argues quite strongly against large-scale elaboration as tonal culmination. The works that stay in the repertory following Josquin's death are those which rely most heavily on sectionalized elaboration of a modal type; motets attributed to Josquin in late German sources stress such sectionalized elaboration to an even greater degree than the securely attributed works, while moving toward more closed forms in terms of termination, cadential hierarchy, and so forth.

The approach to tonal coherence in Josquin's motets advocated here is a modern theoretical construct that relies on principles articulated by Renaissance theorists. Modal types, the basic characteristic units of *Ut / Re / Mi* tonality, result from the union of the technical bases of modal theory with the exigencies of a musical tradition rooted in plainchant, hexachordal manipulation of the gamut, and counterpoint. Considering tonal coherence from this perspective resolves otherwise troubling anomalies. Modal types appear in various structural guises that range from an elemental building block in simple counterpoint to an abstract skeleton encompassing entire sections and compositions. This analytical framework allows distinctions to be drawn among works that a theorist like Aron would place within the same modal category, while illustrating the essential similarity of procedure shared by works from different modal categories. The way a modal type is used can define categories of motets and explain the significance of such events as local changes in tonal orientation, 'motivicity', and contrapuntal alternatives. Finally, modal types and the theory of *Ut / Re / Mi* tonality offer an explanation for the relevance of diverse

analytical approaches that have on occasion seemed so pertinent to some motets and yet inapplicable to others. It is a model that results from theory considered practically and practice considered theoretically.

This chapter, with its examples of modal types from each tonality and introduction of other features as appropriate to an exploration of tonal coherence, has painted in broad strokes the concerns that will be undertaken in more detail in the following chapters. It now remains to provide a fuller survey of the characteristics of each tonality. A chapter devoted to each tonality first provides an overview of the motets in the given tonality, and then discusses with representative examples the modal types and finals characteristic of that tonality, followed by a more detailed examination of aspects of tonal coherence in individual works of that tonality.

CHAPTER 4

RE TONALITY

Overview

Roughly half of the motets attributed to Josquin may be classed in the *Re* tonality; this relatively large unified body of works makes it easier to draw secure normative conclusions about cleffing, register, modal types, cadential priorities, incorporation of plainsong, etc.[1] The motets of the *Re* tonality reflect the prominence of Marian texts of both devotional and liturgical origin, and their frequent association with Mode 1 (and to a lesser degree Mode 2) chants.[2] Example 4.1 gives the voice ranges and illustrates the registral conventions of this tonality. The clef configuration defines the bassus range and the upper limit of the superius as the most regular. The preferred polyphonic configuration is a G final and B-flat signature and c1-f4 clefs with three vocal types: superius, altus/tenor, and bassus. High clefs are uncommon as is a clear four-voice registral distribution. Of the six works with a D final, at least two reflect polyphonic conventions attached to the chant they incorporate.[3] There is

---

[1]Additionally, the *Re* tonality contains the smallest number of motets of questionable authenticity and the fewest works transmitted only in late German sources.

[2]A plainsong basis has not been identified for only two of the Marian motets: *Illibata Dei virgo nutrix* and *Ecce tu pulchra es*. The acrostic text of *Illibata Dei nutrix* and its solmization tenor suggest that a chant relationship is highly unlikely. *Ecce tu pulchra es*, on the other hand, with its Song of Songs text, could conceivably be based on an as yet unidentified chant, most likely an antiphon. See the discussion of *Descendi in ortum meum* in Chapter 5.

[3]The transmission of one of the motets with G final, *Ecce tu pulchra es*, also suggests that scribal intervention could be responsible for a different version of the motet. Two late sources of *Ecce tu pulchra es* change the clefs, remove the flat signature, and effectively transpose the work up a fifth. See Cummings (1979:178).

no evidence to suggest that the choice of final, clef configuration, or modal type represents any kind of plagal-authentic modal distinction. Registral restrictions do affect the disposition of the modal type however, and distinct profiles depend on the placement of the final. While *Re(G)* motets frequently make use of modal types associated with *Re (D)*, *Re(D)* motets rarely employ those associated primarily with *Re(G)*.

Tables 4.1 and 4.2 summarize the motets of the *Re* tonality, arranging them by final and text type, segregating motets which first appear in late German sources.[4] Table 4.3 summarizes the distribution of motets. As these tables illustrate, a concluding cadence on the final (in tenor and bassus) is the norm, with the notable exception of the psalm motets. Major internal cadences (at the ends of *partes*) are also usually to the final in the non-psalm motets; the significance of interior cadences to other degrees is discussed below.

[4]These are discussed in Chapter 8.

Table 4.1: *Re (G)* motets

Motet	Text	Chant mode	Clefs	System	Final
Marian:					
**Ave Maria...benedicta tu*	ant. with add	1	g2-c3-c3-f4	b	G
**Missus est Gabriel* (4vv)	antiphons	?&1	c1-c4-c4-f4	b	G
**Pater noster / Ave Maria*	preces / ant.	1	c1-c3-c4-c4-c4-f4	b	G,G
**Virgo salutiferi*	preces / ant.	1	[c1]-c4-c4-c4-f4	b	Bb,C,G
Salve regina (5vv)	antiphon	1	g2-c3-c3-c3-f3	b	G,G[Bb],G
Salve regina (4vv)	antiphon	1	[ ]-c1-[ ]-c4	[b]	G[D]
Vultum tuum deprecabuntur	preces	2	c1/g2-c3-c3/c4-f4	b	G,G,G,G,G,G,G
Virgo prudentissima	antiphon	1	c1-c3-c4-f4	b	G
O virgo virginum	antiphon	2	c1-c3-c3-c4-f4-f4	b	F[A],G
O virgo prudentissima	preces / ant.	2	c1-c3-c4-c4-c4-f4	b	G,G
Illibata Dei nutrix	acrostichon		c1-c4-c4-c4-f4	b	G,G
Praeter rerum seriem	sequence	1	c1-c3-c3-c4-f4-f4	b	G[Bb],G
Ecce tu pulchra es	Song of Songs		c1-c3-c4-f4	b	G
+*Ecce maria (O Admirabile)*	antiphon	2	g2-c3-c3-f4	b	G
+*Germinavit (O Admirabile)*	antiphon	1	c1-c3-c3-f4	b	G
Hymns:					
Ave maris stella	hymn	1	g2-c1-c3-f3	b	G,G
Honor decus	hymn	1	c1-c3-c4-c5	b	G
Christological					
Victimae paschali laudes	sequence	1	c1-c4-c4-f4	b	G,G
Tu solus	elevation motet		c1-c3-c4-f4	b	G,G
Tu lumen	elevation motet		c1-c3-c3-f4	b	G
Domine, non secundum	tract	2	c1-c3-c4-f4	b	G,Bb,G,G
Psalms:					
In exitu Israel	psalm + ant.	t.p.	c1-c4-c4-f4	b	G,A,G
Qui habitat	psalm		c1-c4-c4-f4	b	A[C],D
Post-1537 German source**					
Cantate Domino	psalm		c1-c1-c3-c4-f4	b	D[A],G
Levavi oculos	psalm		c2-c3-c3-f4	b	A,D
Usquequo, Domine	psalm		c1-c3-c4-f4	b/bb	D,G

*Incorporates "Ave Maria" antiphon.

+See the disscussion of the *O admirabile commercium* cycle below.

**These works are discussed in Chapter 8.

Table 4.2: *Re(D)* motets

Motet	Text	Chant mode	Clefs	System	Final
Marian: *Gaude virgo, mater Christi*	sequence	1	g2-c1-c4-c4		D
Hymn: *Monstra te (Ave Maris stella)*	hymn	1	[ ],c4-c4-f4		D
Christological: *O Domine Jesu Christe*	meditation on Passion		c3-c4-c4-f4		D,A,A[E],F,D
Psalms: *Memor esto verbi tui* *Domine ne in furore* (ps. 6)	psalm psalm		c1-c3-c4-f4 c1-c3-c4-f4		E,A[E] E[B],D[A]
****Post-1537 German source:** *Mirabilia testimonia*	psalm		c1-c3-c4-f4		A[E],D

Table 4.3: Distribution of Motets[5]

Tonality: 32 motets

			Total:
Final:	G = 23 (+3);	D = 5 (+1)	= 28 (+4)
Incorporate chant:	G = 18	D = 2	= 20
Five or more voices:	G = 7 (+1)	D = 0	=7 (+1)
Antiphon (no other text or additions):	G = 7	D = 0	=7
Antiphon and additional text:	G = 4	D = 0	=4
(Total antiphon:			=11)
Psalm:	G = 2 (+3)	D = 2 (+1)	=4 (+4)
Hymn:	G = 2	D = 1	=3
Sequence:	G = 2	D = 1	=3
Elevation motet:	G = 2	D = 0	=2
Tract:	G = 1	D = 0	=1
Other:	G = 3	D = 1	=4

[5]Motets in late German sources are shown added in parentheses.

Over two-thirds of these motets incorporate a chant melody and slightly fewer than half of the G motets use antiphon texts. Psalm motets first appearing in late German prints balance the relatively few (four) securely attributed psalm motets in this tonality. The motets for five or six voices all incorporate Marian texts and use a G final, accounting for about one quarter of the total, while the D motets are uniformly for four voices. Motets on non-Marian texts are less frequent in the *Re(G)* tonality: five psalms, three of which first appear in late German prints, and four Christological texts. The Christological motets have distinctive traits associated with liturgical context, not unlike the near uniform incorporation of plainchant by the Marian motets. *Victimae paschali laudes* uses 'double' cantus firmus material: the paraphrased sequence is stated primarily in the tenor, but also in the altus and bassus, coupled with the successive note-for-note statement in the superius of two chansons; the tract *Domine non secundum peccata nostra* was part of a Roman liturgical tradition. Two elevation motets, *Tu solus qui facis mirabilia* and *Tu lumen tu splendor Patris*, complete this group; like *Victimae paschali laudes*, *Tu solus* incorporates the Okeghem chanson *D'ung aultre amer*. *Tu lumen* is also associated with the *D'ung aultre amer* melody—it appeared as an elevation motet which accompanied the *Sanctus D'ung aultre amer* published in Petrucci's *Fragmenta missarum* (*RISM 1505/1*).

This chapter will examine tonal coherence and the conventions of the *Re* tonality through three main topics: modal types, chant influence, and formal-constructive considerations. Within those large boundaries, the discussion follows to a certain extent the groupings suggested by Tables 4.1 and 4.2, initially separating G and D finals, comparing the tonal organization of motets with similar texts, chant associations, compositional techniques, and number of voices; and illustrating *Re*

conventions of motive, imitation, and cadential hierarchy. A consideration of three motets—*O Domine Jesu Christe*, *Vultum tuum deprecabuntur*, and *O admirabile commercium*—focuses questions about the degree and kind of relatedness among the *partes* of motets with multiple sections and illustrates a continuum in both tonal and functional associations from multi-partite motet to motet cycle.

The interior and final cadences of the psalm motets in Table 4.1 set them apart from the other motets in this tonality and while they display the characteristics of the *Re* tonality, they also exhibit peculiar features. I will treat these motets separately and argue that their distinctive tonal conventions relate to their psalm texts and reflect a 'resonance' of the conventions of psalmody. These motets have frequently been associated with a 'heightened text expressivity', analyzed from rhetorical perspectives, and connected to humanist influences, but their tonal conventions show as strongly as the Marian motets the influence of liturgical associations. The most important difference is that they are associated with a reciting tone and chant style which is rarely quoted directly, unlike the melodic antiphon chants associated with Marian texts. A brief discussion of a group of explicitly functional settings of hymns and a tract which stand to one side of the major trends of *Re* tonality concludes the chapter.

Modal Types

Chapter 3 gave an overview of modal types as agents of tonal coherence and illustrated generally their use from the small scale to the large, including examples from several *Re* motets. Two primary modal types are associated with this tonality (*re-fa* and *re-la)* and each carries with it a distinctive tonal profile. The *Re(G):re-fa* modal type is by far the most frequently encountered. It carries with it cadential emphasis on G, D, B-flat, and F, the latter two particularly associated with the *fa* of

the *re-fa* modal type. While this type might suggest Mode 2 associations, it is connected here with both Mode 1 and Mode 2 chants. The *Re(G):re-la* modal type carries a stronger interior cadential emphasis on D associated with the *la* of the modal type, and tends to use secondarily patterns from the *Re(D)* tonality which may introduce cadential emphasis on A. With so few motets in the *Re(D)* tonality, it is difficult to suggest norms, but the tendency in these motets is toward *re-la* + *re-fa* in either of two pitch dispositions: D-A + A-C or D-A + D-F. The distinct pitch dispositions described by the same solmization syllables emphasize the priority that I argue belongs to the *voces* rather than to the *litterae.*

Re(G):Re-fa

I will demonstrate aspects of the *Re(G):re-fa* type with illustrations from three motets: *Ecce tu pulchra es* (*Werken* 30; Blume, *Chorwerk* 18:1), *Missus est Gabriel angelus* (*Werken* 17), and *Pater noster - Ave Maria* (*Werken* 50). All three are Marian motets, but otherwise represent different compositional concerns and different manifestations of the modal type. Both *Ecce tu pulchra es* and *Missus est Gabriel angelus* are set in a single *pars* for four voices. *Ecce tu pulchra es* apparently incorporates neither a chant melody nor any other scaffolding device and has no known specific liturgical assocation.[6] *Missus est Gabriel* also lacks direct liturgical assocation, but apparently compiles related texts—antiphons associated with the Annunciation—and incorporates a plainsong antiphon as the basis of points

---

[6]Mattfeld (1959:33) pointed out that verses of this text (*Song of Songs* 1:15-17 and 2:1-2, 4-5) made up the antiphons and lections of Nocturnes for the Nativity of the Virgin, but that nowhere was this particular succession of verses prescribed. Drake (1972:237-8) observed the growing popularity of *Song of Songs* texts and their associations with Marian devotions, noting that no fewer than nine of the texts set in *RISM 1502/1* draw their texts from this source. He cites the adoption of Sarum votive antiphon chants which use these texts on the continent. Although I have discovered no liturgical melody associated with this text, the possibility cannot be ruled out without a more exhaustive investigation of period liturgical books and a fuller picture of the specific local traditions which may have influenced Josquin's choice of chant melodies.

of imitation in the second half of the motet.[7] Unlike *Ecce tu pulchra es* and *Missus est Gabriel angelus*, the *Pater noster - Ave Maria* pair probably dates from among the last of Josquin's motets (Kellman 1976:208).[8] This six-voice setting is built on a strict plainsong canon in long notes in the tenor and altus.

---

[7]The standard antiphon differs in its last words (which are 'desponsatam Joseph') and no matching musical text has been discovered. (Compare *L.U.* 1416.) Osthoff's suggestion (1965:II,48-9) that the chant borrows the opening of the antiphon *Gabriel Angelus* (*L.U.* 1417) seems unlikely, since only the opening interval (a leap of a fifth) is obviously borrowed and *Gabriel Angelus* is a Mode 7 chant. The opening text is:

> Missus est Gabriel angelus
> ad Miriam virginem,
> nuntians ei verbum:

The second half of the motet incorporates the shorter version of the 'Ave Maria' antiphon specified for the Annunciation:

> Ave Maria,
> gratia plena,
> Dominus tecum,
> benedicta tu in mulieribus.
> Alleluia.

This antiphon chant with minimal ornamentation forms the basis of imitation in pairs or four voices for the first three phrases of text, apparently breaking off at 'benedicta tu in mulieribus'. See, however, the comparative discussion of chant in *Missus est Gabriel angelus* and *Virgo salutiferi*, below, where the suggestion is advanced that these motets may share a common (and as yet undiscovered) chant model for the final phrases of text, which departs from the more familiar version. The final 'Alleluia' provides a densely motivic and imitative conclusion to the motet. There is nothing in the strict treatment of the 'Ave Maria' antiphon to suggest a change in compositional procedure from the first half of the motet, and it certainly seems possible from its texture and imitative style that the opening is also based on an as yet undiscovered musical model. However, as the cadential profile suggests, the paired voice structure is established cadentially only at the text 'nuntians ei verbum' and then continues through the 'Ave maria' antiphon.

The motet first appeared appended at the end of Petrucci s volume of Josquin's Masses published in 1502 and shows similarities of texture and text relationship to other Josquin motets published in Petrucci's motet anthology of the same year (*RISM 1502/1*).

[8]On the basis of its text, Daniel E. Freeman has recently argued that the *Ave Maria* should be considered of Roman or Ferrarese origin ('On the Origins of the *Pater noster - Ave Maria* of Josquin des Prez,' paper read at the annual meeting of the American Musicological Society, Pittsburgh, November 1992).

Extension of *fa* by *ut-fa* and emphasis on B-flat. Chapter 3 suggested that the most common elaboration of modal types relied on extension of the boundary pitches of the type through areas of tonal focus associated with them. Tonal focus on *fa* is one of the defining features of the *Re(G):re-fa* modal type. *Ecce tu pulchra es* illustrates the *re-fa* modal type with more clarity than most; it is the only motet in the *Re (G)* group with a superius range that extends only to b^{b1}, not to d^{2}. The cadential profile of the motet reflects the priorities of a *re-fa* type with verse endings on G, D, and B-flat. Cadences to the final mark verse groupings following textual divisions: **G D G // G B^{b} D G.** Table 4.4 summarizes these features of the motet.[9] (See also the more detailed cadential profile in Appendix 2.)

[9]Compare the texture of *Ecce tu pulchra es* with the use of texture in *Ave Maria ... virgo serena* discussed in Judd (1985:206-7, 214). See also the textural graph of *Gaude virgo, mater Christi* in Judd (1992a) and the discussion of this motet below. In each of these motets, verse demarcations are clearly paralleled with textural variety.

Table 4.4: *Ecce tu pulchra es*, Text, texture and cadences.

Text	Texture	Voices	Cadence
Ecce tu pulchra es, Amica mea, ecce tu pulchra es, oculi tui columbarum.	varied imitation and repetition, alternating two and three voices	2 3 2 3	G G G G
Ecce tu pulcher es, dilecte mi, et decorus.	homorhythmic	4 ⇓[a]	(F) D
Lectulus noster floridus, tecta comorum nostratum cedrina, laquearia nostra cypressina.	four voice imitation, followed by imitation for two, then three voices	4 2 3	D B[b] G/G[b]
Ego flos campi, et lilium convalium.	voice pairs, invertible counterpoint, followed by four voice imitation	2/2 4	G G
Sicut lilium inter spinas, sic amica mea, interfilias.	varied imitation and repetition, stronger motivic emphasis; voice pairs with free counterpoint added	3→4 3 4	D D B[b]/B[b]
Introduxit me rex, in cubiculum suum, ordinavit in me caritatem.	alternation of imitative duos.	2 2 2	F F D
Fulcite me floribus, stipate me malis: quia amore langueo.	voice pairs, adding a third voice and concluding with four voice free counterpoint	2 3 4	G D D→G

[a] arrows indicate continuation

[b] repeated cadences in voice pairs

The overall cadential plan is articulated through cadences to the final, but repetition, addition of *basizans* motion, or structural voicing also strengthen cadences at verse endings. Interior cadences to F support the extension of *fa* and characterize the two subsidiary interior areas of tonal contrast which conclude with cadences to D. The opening verse of the motet provides a clear illustration of a *re-fa* modal type. All cadences are to the final, G, and *fa* is extended by repetition of a *fa-ut* descending fourth which is followed by a *fa-re* cadence (see Example 4.2). A modal analysis would presumably describe the *ut-fa* species of fourth as foreign to the prevailing mode. A reduction of the last half of the motet (see Example 4.3) illustrates tonal contrast in bs 60-84 which functions as an extension of *fa* through *fa-ut* patterns, framed by the *fa-re* type.

Extension of *fa* by *fa-ut* descent and contrasting *ut-mi*. The *Pater noster - Ave Maria* pair (*Werken* 50) provides an excellent example of a prevailing *re-fa* modal type supported by patterns which appear unrelated to the tonality, but which variously extend, circle, and complement elements of the modal type. The *secunda pars* (*Ave Maria*) incorporates the plainsong in strict canon at the unison in tenor and altus; the altus follows at the interval of three bars. The reduction of the opening in Example 4.4 hints at the small-scale patterns typical of this motet.[10] The declamatory

---

[10]The time interval of the canon coincides with a pattern of perfection at the level of *modus* which is consistently observed. The opening three-fold acclamation 'Ave Maria' is extended by a minim at its conclusion (b. 10); the next phrase, 'gratia plena', resumes the perfect grouping and the rhythmic pattern characteristic of the declamation of this motet. (See bracketed rhythmic units, bs 10-16, in Example 4.4). Voice crossing and the canon itself obscure the distinctive opening figure of the mode 1 chant, as shown in Example 4.4. This is the only setting among the four of this chant by Josquin in which an E-flat is neither signed nor suggested by the principles of *musica recta* in the first phrase of the chant. Similarly, this is the only setting to break from the chant for the words '*gratia plena*'. As the reduction in Example 4.4 illustrates, the framework for the declamation of *gratia plena* is provided by the two outer voices.

style employs few formal cadences: to D in bs 151, 163 and 166; and cadences to G at the end of the motet, bs 188 to 191. Otherwise, articulation of octaves in simple cadence patterns follows the three-bar subdivision of the text declamation (see the cadential profile of the motet in Appendix 2).

A reduction of the entire *pars* (Example 4.5a) shows the patterns which extend the *fa* of the modal type. These patterns are arranged around the mid-point of the text and strong cadential emphasis on D in bs 163-66. As in *Ecce tu pulchra es* the falling fourth *fa-ut* extends the *fa* of the modal type. At the central cadential focus of the motet, this pattern (extended through the emphasis on D to an eleventh) moves to a *fa-re* cadence. Secondarily, a circular melodic pattern around B-flat serves the same purpose of extending the governing *fa*.

The patterns which frame the center cadence, rising *ut-mi* thirds, are used characteristically in immediate literal and near-excessive repetition in the central section of the motet; they serve a contrasting connective function.[11] Just as the *fa-ut* fourth leads to the *fa-re* modal type, so the *ut-mi* third always follows and leads back to the defining *fa* of the modal type. Example 4.5b illustrates the characteristic patterns associated with this modal type and Example 4.5c conceptualizes how they extend the *fa* of the modal type.

Composite *fa-re*. The final common manifestation of a *re-fa* modal type moves from *fa* to *re* in overlapping hexachords as a composite pattern (in which the superius does not conclude on the final, G, but on *re* nevertheless):

---

[11]The use of this figure in this context is characteristic not so much of an individual tonality as of a compositional technique. See the discussion of *In exitu Israel*, *Miserere mei Deus*, and *In principio erat Verbum* below.

FA mi re (ut)
(la sol) fa mi **RE**
B^b A G F E D

This cadential type is prevalent in *Missus est Gabriel angelus*. The extended *fa-re* paradigm occurs at regularly spaced intervals throughout the motet. It is most clearly stated as a *Re(G)* paradigm at the opening and close of the motet. Interior statements reflect the other primary cadential motions connected to this superius pattern, to D and B^b. These are catalogued in Example 4.6. *Fa-ut* patterns are not associated with the extension of *fa* in this category of *fa-re* modal type. Instead, the *re* is extended by patterns associated with it (namely, *re-la*), as occurs in bs 35-40 (see Example 4.6b). The extension of *re* in the superius here then connects smoothly to the opening of the *Ave Maria* chant in b. 44.

The disposition of text and the antiphon melody, as well as the motivic and imitative treatment accorded the final coda-like 'Alleluia', suggest a tripartite division of the single *pars* of *Missus est Gabriel angelus*, which coincides with cadential emphasis. (See the cadential profile in Appendix 2.) Cadences frequently come in pairs as a result of the strict paired imitation prevalent in the motet and the repetition which characterizes the 'Alleluia'. These are indicated by brackets on the cadential profile of the motet in Appendix 2. As is common with motets using this modal type, interior cadential emphasis on the secondary area B^b is framed by cadences to D (i.e., bs 52-66), and the final *re* cadence is strongly reinforced (bs 81-end). The single cadence to F is an interior cadence framed by cadences to D and B^b. The lack of *basizans* motion reflects the two-voice framework of the imitative scheme.

The imitation which opens the 'Alleluia' introduces a contrasting motive of overlapped falling fourths (see Example 4.7). This motive is usually associated with the *re-la* modal type, and is especially prominent in motets based on that type.[12] Here, it introduces another imitative motive also connected to the *re-la* modal type, namely, *la-fa-la-sol-mi-re*, which here connects to the composite *fa-re* type, characteristic of *Missus est Gabriel*.[13]

Harmonic implications of *Re(G):re-fa* modal type. Two elevation motets, *Tu solus qui facis mirabilia* (*Werken* 14) and *Tu lumen tu spendor* (*Werken Missen* II, appendix), quite distinct in texture from the works thus far discussed, give an unambiguous picture of the sonorities available to the *Re(G):re-fa* modal type:[14] on the final, G, in near equal numbers on C, D, and F, and with less frequency on B♭. A comparison of the opening two phrases of the motets reveals similar motion to and from the same basic sonorities (see Example 4.8). The final phrase of *Tu lumen tu spendor Patris* (a slightly varied repetition of the second phrase, but concluding on the final) and the concluding phrase of the opening homophonic section of *Tu solus*, show a parallel use of the *re-fa* modal type, moving from harmonic support of the superius B♭ to '6-3' sonorities moving to D which prepares the final cadence.[15]

---

[12]See the discussion of *Salve regina* and *Illibata Dei virgo nutrix* below.

[13]These contrasting figures may reflect a source chant; see the comparison of *Missus est Gabriel* and *Virgo salutiferi* below. The tonal profile of the motet as a whole suggests that the use of *re-la* melodic patterns is of local significance and connects to the prominent *re-fa* cadential type.

[14]Both motets appear in contexts connected with Okeghem's *D'ung aultre amer* and both have the characteristic features of elevation motets: relatively short, simple homophonic settings of Christological texts, using fermata chords. The genesis of this style (and thus the dating of these motets) remains a subject of controversy. See the summary of arguments placing these motets with the early Milanese works or with the later Roman works in Noble (1984:25-6).

[15]The *secunda pars* of *Tu solus* uses a *re-la* type introduced by the superius quotation of the *D'ung aultre amer* melody . See the similar distinction of types coinciding with *partes* of a motet in

Summary: conventions of *Re(G):re-fa* modal type. The overview of these motets illustrates broadly the conventions associated with the *Re(G):re-fa* modal type. The boundary pitches of the type may be elaborated by use of overlapping patterns (*fa-ut*, *fa/ut-mi*, and a more extended *fa-re*). Cadences to G, D, B-flat, and F are usual. Cadences to B-flat and F are normally related to the *fa-ut* extension.

Re(G):Re-la

The *Re(G):re-la* modal type is less prevalent among the motets, a situation that may be associated at least in part with the relatively few motets set in high clefs, which might be seen as more amenable to this modal type.[16] Certainly, later tendencies of modal association and cleffing—i.e., the association of the tonal type c1-b-G. and Mode 2—tend to argue against this modal type in the common c1-f4 clef distribution. More significant in Josquin's *oeuvre*, however, may be the compositional techniques associated with this modal type: the three motets associated with it are the Marian motets for five voices: *Salve regina* (*Werken* 48), *Illibata Dei virgo nutrix* (*Werken* 27), and, to a lesser degree, *Virgo salutiferi*

Victimae paschali laudes. Only the *prima pars* of *Tu solus* appeared in *J1505*, where it follows the Sanctus in place of a Benedictus in the *Missa D'ung aultre amer*. For a detailed neo-Schenkerian graph of the entire motet, see Judd (1984:109-114).

Macey (1989) argued for placing *Tu lumen* in the *Vultum tuum* cycle. While this motet could be used in a modern reconstruction of the cycle, its range is far more restricted than the other motets of this cycle (particularly notable is the lower ambitus of the superius) and its text bears no obvious connections to the otherwise carefully related texts of the cycle, suggesting the unlikelihood of its original place in the cycle.

[16]But see the discussion of the *Vultum tuum* cycle below; these high-clef motets tend toward an extended *re-fa* modal type.

(*Werken* 35; Lowinsky, *Medici Codex*, 42).[17] Both *Salve regina* and *Illibata Dei virgo nutrix* use an ostinato as a scaffolding device. *Virgo salutiferi* is a mensuration motet which combines a text by Strozzi with the well-known *Ave maria* antiphon; the texture of the motet consists of three independent voices added to a canon at the octave of the cantus firmus in superius and tenor.[18] Thus all three motets use a scaffolding device in the tenor range (the *Salve regina* ostinato is given to the quinta vox) and both *Salve regina* and *Virgo salutiferi* state Mode 1 chants in the superius. Extended examples from *Salve regina* in Chapter 3 showed the *Re(G):re-la* modal type at the level of cadence, verse, and *pars*.[19] I will use examples from *Illibata Dei virgo nutrix* to illustrate another aspect of the *Re(G):re-la* modal type, the extension of the paradigm through local tonal focus on *la*.

Extension of *la*: *la-mi* fourth and *fa supra la*. The opening phrase of *Illibata Dei virgo nutrix* begins with the characteristic *re-la* figure, but also emphasizes the melodic use of a fourth—the most prevalent motive in this motet—the interval outlined by the ostinato (see Example 4.9).[20]The opening of the motet establishes the superius and first contratenor as structural voices of imitation and cadences.[21] The 'free' voices most frequently emphasize the two species of fourth used sequentially in

---

[17]See the discussion of the use of the *Ave maria* antiphon and also the imitative procedures of *Virgo salutiferi* below.

[18]See Lowinsky (1968:III,199-201) and Milsom (1989:6-7) regarding the text of the motet. See Sparks (1963:392) on the distribution of the cantus firmus.

[19]See the extended discussion of this motet in Judd (1992a).

[20]Jürgens (1973) has also noted the prevalence of fourths in the motet.

[21]The solmization tenor does not conclude sections on the final and does not take a structural role in cadences.

the opening point of imitation: the *la-mi* fourth (D-C-B^{b}-A) and the *fa-ut* fourth (B^{b}-A-G-F). A catalogue of motives shows the frequency with which the *la-mi* fourth and *fa supra la* figures recur throughout the motet (see Example 4.10).[22] The opening of the *secunda pars* borrows the *la-fa-la* figure from the *Re(D)* tonality and uses the fourths much more starkly as it moves toward the focal *la-mi-la* declamation (b. 132). The most extended move away from these motives occurs in the second section of the *secunda pars* and the move toward the solmization pun on *ut-sol*.[23] The melodic shape of the superius in the final repeated section, like the opening of the *prima pars*, is an extended theme which opens with a *re-la* fifth and then uses the *la-mi* and *ut-fa* fourths sequentially before a close on the final, G.

The mensural and cadential regularity of the motet (discussed further below) extends to the choice of cadence tone and the cadential profile, and influences the level at which the modal type operates (see the cadential profile in Appendix 2). Almost all of the cadences to G illustrate the *re-la* type suggested by the opening of the motet, and the frequent occurrences suggest an organization of small connected units which share motivic and cadential material, rather than the large-scale ordering suggested for *Salve regina* (see Example 4.11).

***Re(G):re-la*: Intersection of *Re(G)* and *Re(D)*.** Two other motets, *Salve regina* ([4 vv] *Werken* 95) and *O virgo prudentissima* (*Werken* 45), take the intersection of *Re(G)* and *Re(D)* implicit in the *re-la* modal type to its extreme. Both are based on

---

[22]The falling fourth motive is characteristic for the modal type. See Judd (1992a) on similar motives in *Salve regina*.

[23]Strictly speaking, G-D with a flat signature would be solmized *re-la*. Two other *Re(G)* motets use the same 'ut-sol' pun. See the discussion of *Praeter rerum seriem* and *Virgo prudentissima* below.

canonic procedures which distribute a plainsong a fifth apart at the level of G and D; and in both the interaction is facilitated by the *Re(G):re-la* modal type.

Salve regina lacks the B-flat signature characteristic of *Re(G)* motets and its double canonic construction is unique.[24] Urquhart (1988:212-17) convincingly demonstrated that *recta* B-flats pervade the *dux* voices and are implicit in the canonic realization of the other voices.[25] The motet reflects obvious musical and textual parallels of the chant: the musical repetition of the first verse (bs 1-14.2 = 14.3-27); the shared opening of the third and fourth verses (bs 28-30 = 40.3-43.4) and the near repetition of verses 7-8 (bs 98-103 = 104-109). The cadential profile follows the chant exactly, resulting in 'double' cadences. (The cadential profile gives only the second cadences—those of the *comes* voices.) Such a strict contrapuntal exercise might seem marginal to a discussion of tonal coherence, but the extraordinary formulaic construction of the canonic voices superimposed on the chant paraphrase (illustrated by the paradigmatic analysis of Example 4.12) has heretofore escaped notice.[26] Like the chant, the motet reserves the registral high point for the central verses of text, climaxing on the words 'illos tuos misericordes oculos'.[27] Cadences

---

[24]The superius and tenor are derived canonically at the fourth above from the altus and bassus respectively. The altus carries a paraphrase of the chant at the level of D and the bassus forms a simple counterpoint it, with occasional references (as at the opening) to the chant melody. Thus the superius states the chant at the level of G, and the *comes* voices, joined by the bassus, conclude the motet with a cadence to G.

[25]Urquhart seems to have doubts about the authenticity of the motet because it stands outside the canonic practice of the canonic motets on account of its large number of 'non-transposing pitches'; i.e. difficult passages created by exact imitation of bass B-flats with E-flats in the tenor. (Urquhart 1988:212-3)

[26]For clarity, Example 4.12 gives only the superius in the distributional table.

[27]The formulaic construction of the motet breaks the chant into small units as follows, with rests indicated by / and cadences tones given in parenthesis:

1. Salve / Regina (G) misericordiae: (G)
2. vita / dulcedo, (G) et spes nostra salve. (G) (=repetition of 1)

follow the chant and are carefully arranged. Characteristically of the *re-la* modal type, there are no cadences to B-flat.

O virgo prudentissima provides the other example of canonic interaction of *Re(G)* and *Re(D)* paradigms in a *Re(G):re-la* modal type.[28] *O virgo prudentissima* combines six stanzas of a Poliziano poem with an altus-tenor canon of the antiphon *Beata mater* in a six-voice texture.[29] The formulaic mode 2 chant displays a limited range, and the six phrases conclude twice each on F, A and G. Josquin reinforces the final, G, through repetition of the two phrases which close on it (see Example 4.13).

In the motet, cadences to A are prominent, while there are none to F.[30] This reflects the parallel emphases in the canonic tenor and altus on the *Re(G)* and *Re(D)*

---

3. Ad te / clamamus / exsulles, / filii Hevae. (G)
4. Ad te / suspiramus (D) gementes / et flentes (F) in hac / lacrimarum valle. (G)

5. Eia ergo / Advocata nostra (D) illos tuos (D) misericordes (C) oculos (F) ad nos converte. (G)

6. Et Jesum / benedictum (F) fructum ventris tui (G) nobis / post hoc (C) exsilium (F) ostende (G)

7. O / clemens (D)
8. O / pia (D)
9. O / dulcis (F) Virgo (G) Maria (G).

The motet is rounded out by the re-appearance of the opening 'Salve' motive for the three-fold 'O' petitions at the end of the motet.

[28]*O virgo prudentissima* and *Virgo salutiferi* are the only mensuration motets in the *Re(G)* tonality.

[29]Milsom (1989:4-5) provides a detailed description of the textual interaction of the poetic text and antiphon.

[30]Dahlhaus (1968/1990:258) discussed the cadential implications of the chant canon, but made no mention of the cadential profile of the motet as a whole.

tonality, respectively. The limited ambitus of the chant means that the *Re(D)* setting is entirely compatible within a *Re(G)* framework. The cadential foci in this motet are those shared by *Re(G)* and *Re(D)* motets. The motet sets up alternating verses of free and cantus firmus composition (i.e., the chant is present for the second, fourth and last verse) and the emphasis on A is present even in those verses which do not incorporate the chant (see the cadential profile of the motet in Appendix 2). The motet employs a *re-la* type suggested by the joined ambitus and cadential implications of tenor and altus. The limited motivic figures which occur throughout the motet involve a play between the levels of *Re(G)* and *Re(D)*: the opening *re-la* figure (see Example 4. 14); an alternation of the division of the octave D-D at A and G (see Example 4.16a, especially verse 2); a combination of *re-la* and *re-fa* (see Example 4.16a, especially verse 5 and Example 4.16b and c, bs 109 ff); and a *fa supra la* figure related to the final phrase of the chant (see Example 4.15). A reductive graph of the entire motet at three levels (Example 4.16) reflects the defined verse structure and distribution of motivic materials, which is evident not only in the presence or absence of chant, but also in textural contrasts and the use of closed modal types for each verse.

The opening of the *secunda pars* employs the contrasting *re-fa* type for a single verse; the only cadences to B-flat in the motet occur in conjunction with this type. The change in tonal focus parallels the change in the text from apostrophe to petition:

Audi, virgo puerpera	Hear us virgin mother
Et stella maris integra,	and pure star of the sea,
Audi precantes quaesumus,	***hear us, we beg, as we pray,***
Tuos, Maria servulos.	your humble servants, Mary.[31]

Specifically, the single pair of cadences to B-flat correspond to the petition: 'Audi, precantes quaesumus'.

Summary: Conventions of *Re(G):re-la* modal type. *Salve regina* and *Illibata Dei virgo nutrix* both use an ostinato, although that is not a requisite of the *Re(G):re-la* modal type, just as the modal type is not necessarily tied to the clef configuration.[32] This modal type does seem to be associated most closely in Josquin's motets with a five-voice texture or a particular canonic procedure. The cadential profile of the motets shows that cadences to G and D are far more prominent than to any other degrees. Indeed the placement of the single strong cadence to B-flat in *Salve regina* in association with the text 'nobis post hoc exilium ostende' suggests that it is uncommon in this modal type and may be used as an expressive device.[33] The same is true of the cadences to B-flat in *O virgo prudentissima*. *Illibata Dei virgo nutrix* suggests the primary subsidiary figures which are available for local tonal focus on the *la* of the *re-la* modal type:

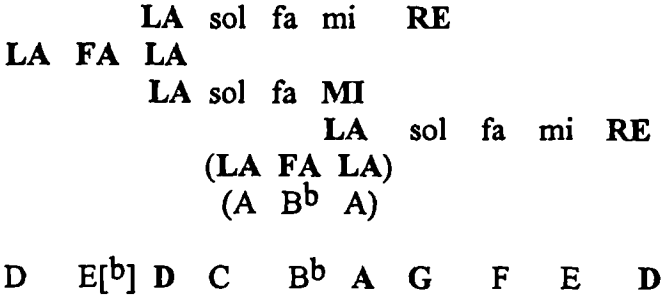
---

[31]Translation from Milsom (1989).

[32]Further on high clefs, see the discussion of *Vultum tuum deprecabuntur* below.

[33]See below on the imitative patterns and cadences in *Virgo salutiferi*.

Figure 4.1: Melodic focus on *La* of *re-la* modal type



The use of melodic patterns from the *Re(D)* tonality is further extended in the canonic construction of *Salve regina* and *O virgo prudentissima*. *O virgo prudentissima* also suggests the possibility of secondary cadences to A in the *Re(G):re-la* modal type.

Re(D)

The *Re(D)* motets contrast with the *Re(G)* motets both in their lesser number (only six, including a hymn setting and psalm motet in a late source) and lack of homogeneity with reference to clef combinations and vocal distribution. They present similar text types, however: three Marian settings (a sequence, an antiphon, and a hymn), two psalms, and *O Domine Jesu Christe*, a large multi-section meditation on the passion.[34] The *Re(D)* motets show a greater emphasis on the *re-la* type, a reflection of the registral distribution of the voices in relation to the final. Extension of the *re-la* modal type in the *Re(D)* tonality is through tonal focus on *la* and addition of *re-fa* cadential patterns. Discussion of *Gaude virgo, mater Christi* (*Werken* 23), from which an example was cited in chapter 3, draws the clearest picture of *re-la* and *re-fa* modal types in *Re(D)* motets.

---

[34]The psalm motets, hymn settings, multi-partite motets, and motets transmitted in late German sources are discussed elsewhere in this chapter and Chapter 8, leaving only *Gaude virgo, mater Christi* for discussion here.

Re(D):re-la + re-fa. As Noble noted, *Gaude virgo mater Christi* 'seems like a small-scale study for *Ave Maria . . . virgo serena*' (1984:31). The three commonly set double versicles[35] are clearly respected in the setting as is the tripartite poetic structure of each versicle of the rhymed sequence text.

Figure 4.2: Text of *Gaude virgo mater Christi*

I	1.	Gaude virgo mater Christi Quae per aurem concepisti Gabriele nuntio.
	2.	Gaude, quia Deo plena Peperisti sine poena Cum pudoris lilio.
II	3.	Gaude, quia tui Nati Quem dolebas mortem pati Fulget resurrectio.
	4.	Gaude, Christo ascendente Et in coelum te vidente Motu fertur proprio
III	5.	Gaude, quae post ipsum scandis Et est honor tibi grandis In coeli, palatio.
	6.	Ubi fructus ventris tui Per te detur nobis frui In pereni gaudio.
		Alleluia.

A distributional analysis (Example 4.17) illustrates the relationship of text structure and modal type. The most direct pairings occur in the outer verse pairs.[36] Likewise

---

[35]The same verses appear in the two settings in the Trent Codices (one a three-voice setting by Battre [DTÖ 40:76, 90-91], and the other an anonymous four-voice setting [Trent 89 #618]) and a motet by Dufay (*Opera omnia* 5:1).

[36]Mattfeld (1959:114,125) argued that the motet was based on a cantus firmus and cited as its source the tenor of Battre's *Gaude virgo*. However, the relationship between the two settings does not go beyond the opening *re-la* outline of the tenor. Instead, much like *Ave Maria ... virgo serena*, which apparently borrows only the opening sequence melody, textural distribution emphasizes the parallel tonal construction of each verse. See the discussion and graphic illustration of *Ave Maria ... virgo serena* in Judd (1985:205-6; 222-24; 230-39). See also the textural graph of *Gaude virgo mater*

the cadential profile of the motet is straightforward: each verse concludes with a formal cadence to D. The 'aab' scheme of each verse is followed; the 'a' is based on a *re-la* type, followed by a *re-fa* formal cadence to D. In addition to the obvious parallels of adjacent verses, the structure of the motet as a whole is carefully planned, framed by the opening verses and concluding alleluia (which adopts the tripartite scheme of the individual verses). The textual focus changes in the central double versicle from the Blessed Virgin to Christ and verse three stands apart both on account of its more extensive setting and its denser motivic construction. This central pair of verses also contain the most direct word-painting of the motet: the ascending octave of bassus and altus respectively for the words *Gaude, Christo ascendente / et in coelum te vidente.* Similarly, the use of texture, mensuration, and cadential hierarchy carefully delineate a large-scale conception of the text which the distribution of modal types parallels.

* * *

Christi in Judd (1992a). Both motets are in a single *pars* that consists of seven clear sections, based on texts well known in contemporary Books of Hours, shown in parallel here:

[1] Ave Maria, gratia plena...	Gaude virgo, Mater Christi...
[2] Ave cujus conceptio...	Gaude, quia Deo plena...
[3] Ave cujus nativitas...	Gaude, quia tui Nati...
[4] Ave pia humilitas...	Gaude, Christo ascendente...
[5] Ave vera virginitas...	Gaude, quae post ipsum scandis...
[6] Ave praeclara omnibus...	Ubi fructus ventris tui...
[7] O Mater Dei, memento mei. Amen.	Alleluia.

Both motets mark the start of verses with salutations: 'Ave' and 'Gaude' respectively; both use a homorhythmic texture in the fifth section and move to triple mensuration at this point; all verses of both conclude with clear cadences to the final; and the modal type operates at the level of the verse.

These examples from *Re(G)* and *Re(D)* motets demonstrate in general terms the modal types associated with the *Re* tonality and the means of tonal focus through which elements of those modal types may be extended and emphasized. I have also suggested the cadential priorities associated with the tonality and its subsidiary modal types. To offer further insight into tonal coherence in individual motets, this framework must be refined by considering the role of pre-existing melodies in the tonal structure of the polyphonic work and formal considerations which reinforce (or undermine) putative tonal connections.

Modal Types, Pre-existent Melodies, and Chant-directed Tonality

A descriptive outline of the use of a pre-existent melody or scaffolding device is available for almost every Josquin motet known to employ such material: e.g., Mattfeld (1959 and 1961), Sparks (1963), Elders (1968, 1969, and 1976), Bujic (1973), and Milsom (1989). These studies illustrate the constructive, mensural, symbolic, and rhetorical significance of a cantus firmus, but the relationship between pre-compositional models and tonal coherence has yet to be explored in any systematic way. While options for tonal direction in chant-based works relate to chant tradition, they also show an interplay with the polyphonic conventions of *Ut / Re / Mi* tonality. Non-chant-derived polyphonic compositions do not manifest the same options for tonal direction, nor are those options even necessarily shared among chant-based motets. Often, elements which appear problematic in determining tonal coherence relate to a precedent in plainchant; the resulting 'polyphonic chant tonality',

while perhaps not obvious today, must have been a commonplace for a composer with a working relationship with plainsong such as Josquin's.[37]

Tonal elements of motets which can be connected to a precedent in pre-existent material include:

- the tonal relationship between the endings of successive *partes* of motets and use of cadential foci not generally associated with a particular modal type or tonality;
- durational correspondence of modal types and *cantus firmus* statements;[38]
- structural use of plainchant in the superius;
- incorporation of *cantus firmus* material in motivic contexts;
- alteration of a pre-existing plainchant;
- 'resonance' of a chant style, e.g., psalmody, in the formal and tonal arrangement of a motet.[39]

Cadential foci

Two motets, *O virgo Virginum* (*Werken* 83) and *Virgo prudentissima* (*Werken* 25) illustrate the interplay of chant-based conventions of cadence and the *Re* tonality. The *prima pars* of *O virgo virginum* concludes with a cadence on F, the only one of the *Re(G)* motets to do so. Osthoff (1965:II,44) suggested that this conclusion, which 'deviated' from the basic tonality, was prompted by Josquin's response to the astonished question asked by the text of the *prima pars*. While the meaning of the

---

[37]Regarding 'chant-based' tonality, see especially the discussion of gospel motets in Chapter 7.

[38]This is discussed below in conjunction with formal considerations.

[39]This is discussed below in reference to the psalm motets.

text and choice of cadence tone may be related here, this is a prime example of what I would describe as 'chant-directed' tonality, for Josquin's choice of cadence follows his chant model. In *O virgo virginum*, the chant appears in clearly defined phrases in long notes in the superius, frequently, but not always, preceded by a statement in the tenor.[40] The final phrases of chant adopt shorter note values and it is integrated into the imitative texture of all the voices by the end of the motet. The chant matches the version given by Mattfeld (1959:Plates LXXIV and LXXV), which was apparently unknown to Osthoff. The division of the motet in two *partes* follows the syntactic division of the antiphon text shown in Figure 4.3.

Figure 4.3:. *O virgo virginum*. Text and Translation

O virgo virginum,	O virgin of virgins
quomodo fiet istud	how could this come to pass
quia nec primam similem	since nothing like you
visa est,	was seen before
nec habere sequentem.	nor has been since?
[*secunda pars*]	
Filiae Jerusalem	O daughters of Jerusalem
quid me admiramini	why do you wonder at me?
divinum est misterium	This mystery you see
hoc quod cernitis.	is divine.[41]

The end of the *prima pars* (Example 4.18a) illustrates the chant in the superius; extension and repetition emphasize the ending on F. When Josquin sets a pre-existent melody in long notes in the superius, that voice tends to function as a structural voice in cadences, and the cadence of the chant is observed and indeed

---

[40]The superius is the primary chant voice in spite of the tenor's first entry; in numerous phrases the tenor statements are incomplete, divided, or lacking entirely.

[41]translation by Lionel Salter in liner notes to Archiv 2533 110.

elaborated as is the case here.[42] In the relatively infrequent instances when the superius breaks from chant statement, it reinforces the modal type through cadential extension, as at the opening of the *secunda pars* (see Example 4.19, bs 108-14). Cadential extensions using 'plagal' motion in the second bassus and upward extension of a fifth in the superius characterize the ending of each *pars* of this motet. (See Example 4.18.)

As suggested above, motets in the *Re(G)* tonality observe cadences most frequently on G and D. Cadences to B-flat usually occur in association with the *re-fa* modal type, as do cadences to F, although they may also serve text-expressive functions or provide tonal contrast when juxtaposed with the *re-la* modal type. The *re-la* modal type may use A as a secondary cadential area, usually in connection with borrowed *Re(D):re-la* patterns. The flexible E / E-flat is never the focus of cadential motion, not surprisingly, given its status in the hexachordal scheme. Urquhart (1982:97) pointed out the statistical infrequency of cadences to C in G motets with a flat signature and suggested that he found 'no function or reason' for the low cadential percentage. I would argue that neither the *re-fa* nor the *re-la* modal type, nor any of the patterns commonly used to extend those types, suggest contrapuntal emphasis (and thus tonal focus) on C, which explains the infrequency of these cadences.[43] When cadences to C do occur, they are related to chant precedents. *Virgo*

---

[42]Josquin also accommodates the chant to the prevailing *Re(G)* tonality at other less significant cadences to F. There is no doubt that the conclusion of the *prima pars* is more striking by its contrast: all the other cadences in the motet are to G and, secondarily, D; the beginning of each *pars* clearly emphasizes cadences to G, and interior sections move to D, although only the penultimate phrase of the chant concludes on D. (See the cadential profile in Appendix 1.) In other cases, the superius states interior chant phrases which conclude on F and avoids or delays cadences through imitation.

[43]The primary cadence tones are the Final (i.e. G), the notes which encircle it (i.e. F and either A or B-flat, depending on the extension of the modal type) and the fifth above (i.e. D). The notes on either side of that fifth above are almost entirely avoided (i.e. C and E/E-flat).

prudentissima (*Werken* 25) with its lack of formal cadences to D and pair of cadences to C is a case in point: cadences to C, not D, were a characteristic feature of the antiphon chant the composer knew and the cadential profile of the motet reflects this. (See the cadential profile of the motet in Appendix 2, especially bs 35 and 61.) This only becomes clear when the placement of the chant in the altus for the interior incises is recognized.[44] Cadences to D typify the tonality; cadences to C reflect individual chant models, respected to a greater or lesser degree.[45]

Modal types and *cantus firmus*

Praeter rerum seriem (*Werken* 33) demonstrates tonal control by a *cantus firmus*.[46] The *tenor primus* primarily carries the chant; it is absent from that voice in only one instance—the final phrase of the second verse.[47]

---

[44]See the discussion of the chant placement in *Virgo prudentissima* below.

[45]See the discussion of *In exitu Israel* below for another *Re(G)* motet with cadences to C..

[46]Both Mattfeld (1959: 94-7) and Sparks (1963:387-9) outlined the distribution of the *cantus firmus*, summarized below:

Verse	Text	Chant voice	sequence melody
I.1.	Praeter rerum seriem	T1 // S	a
	Parit Deum hominem	T1 // S	
	Virgo mater.	S // T1 //(S)	
2.	Nec vir tangit virginem	T1 // S	a
	Nec prolis originem	T1 // S	
	Novit pater.	T2	
[*secunda pars*]			
II.3.	Virtus sancti Spiritus	(S) (A) T1	b
	Opus illud coelitus	S // T1	
	Operatur.	S (T1) (S)	
4.	Initus et exitus	B2 // T1	b
	Partus tui penitus	T1 // S	
	Quis scrutatur?	T1 // S // T1	
III.5.	Dei providentia	S // T1 (A)	c
	Quae disponit omnia	T1 (A)	
	Tam suave.	T1 (A) T1 (A)	
6.	Tua puerperia	S // T1 (T2)	c
	Transfer in mysteria,	T1 (T2)	
	Mater ave.	T1 (T2)	

Example 4.20 gives the rhythmicized sequence melody abstracted from Josquin's motet. Osthoff (1965:II,73) pointed out the rising outline (G, B-flat, D) of the opening notes of each verse of the sequence chant and suggested that this and the successive acceleration of the mensuration are responsible for a dynamic intensification. A schematic which corresponds to the modal types used in the motet is given below the melody: *re-fa* for the *prima pars* moving to *re-la* in the *secunda pars*. A comparison of the chant melody and the cadential profile of *Praeter rerum seriem* (see Appendix 2) reveals Josquin's approach to setting this chant. Primary cadences are to G; interior emphasis in the melody on other pitches is supported either by cadences to D or by simple ceasuras on thirds. The long note values in which the melody is stated determine the duration of modal types, which correspond roughly to the length of a double *cantus firmus* phrase, i.e., to each double versicle of text. The restriction of the vocal range of the superius (see Example 4.21) in the *prima pars*, even when it is not stating the chant melody, corresponds to the *re-fa* type connected with the chant, as the ends of the first and second verses of text show (see Example 4.22). Likewise, the association of a different modal type, the *re-la* type, with the *secunda pars* of the motet is indicated by the extension of the superius range at the opening of the *secunda pars* and by the characteristic *re-la* figures employed by the superius when the chant is placed in the bassus in the opening of the fourth verse.[48] (See Example 4.23) The move to a *re-la* type is implicit only in the

---

[47]Unlike *O virgo virginum* (discussed below), the superius is a secondary chant voice; nevertheless, the melodic shape of the chant dictates the tonal profile of the motet, even when it is absent from the superius.

[48]The placement of the chant in the bassus compares with *Salve regina* which also establishes a modal type by moving the chant to the bassus and maintaining the registral connection of the superius. See Example 3.17 above.

chant melody which accompanies the final double versicle, and the disposition of the chant in the *secunda pars* coupled with the free material used by the superius, and the cadential framework, suggests a careful compositional integration of the tonal implications of the chant and the conventions associated with the *Re(G)* tonality.

Josquin's settings which incorporate the *Ave maria* antiphon

Four motets in the *Re* tonality incorporate the same antiphon (*Ave maria*) which provides an opportunity for comparative examination of Josquin's use of a plainsong melody and its relationship to tonal coherence. These motets range from among the earliest works to the latest and represent a wide variety of compositional techniques. *Ave Maria ... benedicta tu* (*Werken* 2), set in high clefs, uses the antiphon as the basis of points of imitation in its first half, continuing with the text 'et benedicta sint beata ubera tua, quae lactaverunt regem regum et Dominum Deum nostrum'.[49] The change in text is marked by a change of mensuration and a marked emphasis on paired voices. *Missus est Gabriel angelus* (*Werken* 17) also uses the antiphon as part of a composite text. The shorter form of the antiphon associated with the Annunciation follows the text 'Missus est Gabriel angelus ad Mariam Virginem nuntians ei verbum'. In this motet, too, the antiphon melody is incorporated into the texture as the basis of points of imitation. *Virgo salutiferi* (*Werken* 35; Lowinsky, *Medici Codex*, 42) and the 'late' *Ave Maria* (*secunda pars* of

---

[49]Kirkendale (1984) identifies the text continuation as taken from the Seventh Reponsory for Matins of Christmas Week (see *Liber usualis* 390). The text combination is unknown except for Josquin's motet and no chant melody matching the second half of the motet has been discovered. Kirkendale presents a rhetorical interpretation of the motet.

Macey (1989) argued that the motet belonged with the *Vultum tuum deprecabuntur* cycle. See the discussion of this cycle below.

Pater noster; *Werken* 50), are set for five and six voices respectively. In both the antiphon melody is set canonically. *Virgo salutiferi* combines a text by the Ferrarese court poet Ercole Strozzi,[50] with the antiphon canon at the octave in superius and tenor. The *prima* and *secunda partes* quote only the first three phrases of the antiphon—'Ave maria, gratia plena, dominus tecum'; the *tertia pars* states the entire short form of the antiphon.[51] The *secunda pars* of *Pater noster* sets the antiphon a single time in canon at the unison in altus and tenor and continues with the text 'Sancta Maria regina caeli dulces et pia, O mater Dei ora pro nobis peccatoribus ut cum electis te videamus'.[52] Example 4.24 aligns the antiphon melodies as set in these four motets. While *Ave maria ... benedicta tu* and *Missus est Gabriel* are tied together most closely in terms of texture and so forth (as *Virgo salutiferi* and the *secunda pars* of *Pater noster* share canonic procedures), *Virgo salutiferi* and *Missus est Gabriel* both set the shorter antiphon: 'Ave Maria, gratia plena, Dominus tecum, benedicta tu in mulieribus. Alleluia' which is given at the top of the example. The other motets use the longer text: 'Ave Maria, gratia plena, Dominus tecum, benedicta tu in mulieribus, et benedictus fructus ventris tui Jesus' and then continue independently. The non-canonic motets use the most florid chant paraphrases, although the rigid adherence to the chant basis is never in doubt. Of the four motets, the late *Ave Maria* alters the chant most noticeably (circled on Example 4.24). Because of the different compositional techniques they employ and their divergent

---

[50]See Lowinsky (1968:III:199-201) and Milsom (1989:6-7) regarding the text of the motet.

[51]See Sparks (1963:392). Milsom (1989:6-7) suggested that the addition of the final clause—'benedicta tu in mulieribus. Alleluia'—coincides with the shift of the poetic text from invocation to petition:

Nunc, caeli regina, tui pro gentibus ora, / Quosque tuis iuvit Filius, ipsa iuva./ Alleluia.
(Now, Queen of heaven, pray for your people and aid those whom your Son aided. Alleluia.)

[52]On this text, see Freeman (1992).

chronological positions in Josquin's output, this group of motets has not been considered together. Generally, discussions of the individual works have suggested that the chant is used only through the phrase 'benedicta tu', breaking off at the words 'in mulieribus'.[53] However, in both pairs of motets shared melodic material for the phrase 'in mulieribus', boxed on Example 4.24 and indicated below or above the standard *Liber usualis* chant, suggests a shared chant basis or at the very least a common compositional technique. In the case of *Virgo salutiferi* and *Missus est Gabriel*, the shared material continues until the concluding 'alleluia' which matches the source chant. The variants in the *Ave Maria* (*secunda pars* of *Pater noster*), on the other hand, suggest compositional direction which focuses tonal coherence and which results in large-scale phrases that emphasize melodies associated with the *Re* tonality: the avoidance of C, and the characteristic falling fourth motives used in the fifth and sixth phrases of the antiphon.[54]

Lowinsky (1968:III,200) argued regarding *Virgo salutiferi* that 'the construction of the canon determines to a great extent the length of the three *partes*, their texture, and the degree of rhythmic motion', all aspects of the motet which will be discussed further below. Here, I would like to discuss in some detail the tonal implications of the chant canon. In the *prima pars*, the melodically-related phrases 'gratia plena' and 'Dominus tecum' are each repeated, the second down a fourth. The *tertia pars* of the motet stands apart from the *prima* and *secunda partes* not only by its continuation of the chant, but also by the adjacent statements of the chant phrases and the changed vertical relationship of the canonic voices occasioned by the shorter

---

[53]See the discussion of these motets above. As Example 4.24 illustrates, they do diverge from the *Liber usualis* chants at this point and I am unaware of any source chant with variants which match these motets.

[54]See the discussion of the falling fourth motive (used by three of the motets in phrase six) as characteristic of this tonality above. Cf. especially *Illibata Dei virgo nutrix* and *Salve regina*.

time interval of the canon. At the words 'in mulieribus' a motive from the canon permeates the texture for the first time. Shorter note values, sequential use of motives and repetition of small phrases characterize the second half of the canon in the *tertia pars*.

A comparison of the polyphonic context associated with each phrase of the chant (shown in Example 4.25) illustrates the way in which the pre-existing melody influences the tonal make-up of the motet. Clear parallels may be seen between the setting of 'Ave maria' in the *prima* and *secunda partes*. The lower voice motive which introduces the cantus firmus is immediately repeated and based on the same outline. The bassus articulates a simple counterpoint against the chant canon which acts as a framework that is elaborated in the *secunda pars*.[55] This elaboration introduces a melodic cell which occurs with increasing frequency in the motet as the basis of imitative and concentrated motivic writing, primarily in conjunction with the chant canon, as may be seen by the chant accompaniment of the opening chant phrase in the *tertia pars* and subsequent chant phrases in all *partes*. Literal and sequential repetition of small motives in the free voices are used to embellish what is essentially simple counterpoint of a canon and added bassus.

The cadential profile of the motet also provides a measure of the influence exerted by the *Ave maria* antiphon on tonal shape. Even though motivic sharing of chant material occurs primarily at the end of the motet, when the mensural values of the canon correspond to those of the free voices, the ordering of the opening cadences (bs 1-84; see the cadential profile in Appendix 2) corresponds to the opening phrase of the chant: (G) B♭ F G D, at a much larger scale than any of the chant statements in the motet. The *fa-ut* interval which opens the antiphon and the absence of the note A

---

[55]See the examples of other such bassus/superius counterpoint below.

in the antiphon phrases used by Josquin are suggestive for the strong cadences to B-flat in a *re-la* motet, and the lack of cadences to A that are sometimes found with this modal type. Further, the unusual cadential endings of the *prima* and *secunda partes* to B-flat and C respectively mark the partial nature of the cantus firmus statements, reserving the cadence to the final for the end of the *tertia pars* which states the antiphon in its entirety.

Possible Alteration of Source Chant in Service of Tonal Coherence

Chant precedents can exert far-reaching influence on tonal direction in a variety of ways as suggested above: choice of cadences, melodic emphases, and so forth. Of the motets I have discussed so far, only in the case of the *Pater noster -Ave Maria* would I suggest that Josquin may have altered a chant and done so in a way which reflects the conventions of the *Re* tonality. It seems clear that he respected the tonal implications of the chants he used, even though all the evidence suggests that the resulting motet was more often than not divorced from the functional associations of that chant. *Virgo prudentissima*[56] (*Werken* 25) offers evidence that caution should be exercised before suggesting that Josquin has altered a source chant. Chant versions close to Josquin's exist, but no exact match for this motet has yet been uncovered.[57] Krantz (1989:213) argued that the composer deliberately altered the chant in order to accommodate a Mode 1 chant to Mode 2 setting:

---

[56]This motet is attributed to Isaac in *RISM 1537/1* and *1559/1* as Osthoff (1965:II:47) and Noble (1984:72) noted, probably through confusion with Isaac's six-voice setting.

[57]Preliminary work by Bloxam has demonstrated how necessary further work on local chant variants is: 'Some Preliminary Remarks Concerning the Origins, Contexts and Implications of Busnoys' Plainsong Cantus Firmi' (Paper read at the symposium 'Continuities and Transformations in Musical Culture, 1450-1500: Assessing the Legacy of Antoine Busnoys,' University of Notre Dame, November 1992).

> Josquin treats the chant quite freely, altering it with more than mere decoration, so that the tenor fits the customary plagal range for a G final and a flat signature. In particular, the characteristic mode 1 figure that sets the text "quasi aurora" in the chant has been replaced in the tenor by a figure that outlines the plagal diatessaron and the mode 2 *repercussio* and in the superius by a figure that outlines the modal diapente without the upper neighbor. Only the general shape of the original figure has been retained.

He supported this assertion with the examples reproduced in Example 4.26. Krantz relied on the chant as given in the *Liber Usualis* (p.1600[2]) and assumed that the tenor and superius, which state the two opening phrases of the cantus firmus in canon, continue as the primary carriers of the chant melody. Mattfeld (1959:Plate LIX) cites the chant as transmitted in a 16th-century antiphoner. From her source I believe that it is possible to show that the altus is the principal voice of the migrating chant for the central incises of text (see Example 4.27);[58] the chant that Josquin knew varied significantly from the *Liber Usualis* chant on which Krantz based his argument, and his suggestion of deliberate compositional alteration in the service of 'modal presentation' is untenable.

Figure 4.4 outlines the distribution of the *cantus firmus*, in summary and modification of Mattfeld: the principal chant voice for the opening incises are superius and tenor; the altus consistently carries the chant for incises 3-6; 4-6 use altus, tenor, and superius; and the tenor freely paraphrases the chant in incise 7, moving to imitation in all voices, apparently free of *cantus firmus* for the final incises.[59]

---

[58]The number of motets in which the altus is the principal chant voice for large sections argues against assuming structural primacy of the tenor. See especially the discussion of the gospel tone in *In principio erat Verbum* in Chapter 7.

[59]The main variants between the *LU* and the 16th-century setting are in the phrases 'quasi aurora, valde rutilans' (one phrase in the *Liber*, two in Mattfeld) and 'tota formosa et suavis es' (again one phrase in the *Liber*, but three in Mattfeld) which suggests a different cadential hierarchy in the

Figure 4.4. Text and cantus firmus distribution, *Virgo prudentissima.*

Text	
1. Virgo prudentissima	S/T (repeated A/B)
2. quo progrederis	S/T
3. quasi aurora	(T) (S) A [A= only voice 'at pitch']
4. valde rutilans	A/S/T
5. filia Sion	A/S/T
6. tota formosa	A/T/S
7. et suavis es	T (elaborate paraphrase)
8. pulchra et luna	[T/B/S/A free imitation?]
9. electa	[T/S/B/A free imitation?]
10. ut sol	[S/T/A/B solmization pun]

As Example 4.28 shows, the altus chant statements are supported by sequential bassus cadential patterns making the transition from the cadence on C which closes 'quasi aurora' and preparing the B-flat with which the next phrase begins. The continuation of the next small chant phrase in the upper voices is overlaid above a static bassus and again extended by sequential repetition which connects between chant statements (see Example 4.29). The free material of the last three incises of the text condenses the formulaic melodic material of the chant to its essentials (see Example 4.31), which are directly connected to the *re-la* type of the motet, as shown by the reduction of the opening and conclusion of the motet in Example 4.30.

* * *

---

earlier version with its two cadences to C which are not retained in the *LU* chant. A marked change of texture occurs in the motet at 'pulchra ut luna' (four-voice imitation of short phrases) and the melodic material is only loosely related to known chant versions. It is impossible to say definitively whether Josquin was using an as yet undiscovered variant of the chant, but it seems likely that as in other motets, he moves to free composition at the end of the motet. This is signaled by the obvious introduction of melodic elaboration of the chant in the tenor paraphrase on 'et suavis es', and the conclusion of the motet with the musical pun on 'ut-sol'. *Illibata Dei virgo nutrix* also includes the text 'pulchra et luna electa ut sol' and incorporates the same solmization pun for 'ut-sol' as does *Praeter rerum seriem.*

While studies of the motet in the Josquin generation frequently make much of pervading imitation as a compositional device and the increasing tendency towards freely composed composition in the sixteenth century motet, it would be difficult to over-estimate the influence of chant on the motets of the *Re* tonality. The significance of chant models for this tonality stems largely from the predominance of Marian texts. Even when the primary text of the motet has no chant model, as the humanist text *Virgo salutiferi*, Josquin incorporates a well-known chant. Indeed, the tonal influence of the *Ave Maria* chant is perhaps most wide-reaching in this motet.

The examples I have cited suggest that Josquin respected the melodic and tonal implications of his chant models, relying on placement in the polyphonic texture and cadential patterning to reinforce or undermine aspects of the chant, rather than altering the chant itself. To take a single example, apparent tonal anomalies—cadences to C in a *Re(G)* motet—are consistently connected to chant precedents. It would appear that he tended to treat chant more freely near the end of a motet, integrating motives into the full texture, and even dropping the chant entirely. However, the group of motets which share the *Ave Maria* antiphon suggest caution about even this observation. At the very least, the comparative study of the *Ave Maria* motets suggests parallels that have previously gone unnoticed which may point to a common source chant. These and other examples cited above suggest that in motets in which it appears that Josquin has departed from his source chant, it is more likely that the local variant at the composer's disposal (or in his memory) has as yet been undiscovered.

Modal Types and Formal Considerations

In the course of describing the modal types of the *Re* tonality and their relationship with pre-existing melodies, I have raised the topics of textual delineation,

textural contrast, and repetition several times. I would like now to look more specifically at the relationship of such formal considerations and tonal coherence.

Alternation of *re-fa* and *re-la* modal types at the level of *pars*

The discussion of *Praeter rerum seriem* above suggested not only that the modal type is closely related to the disposition of pre-existing material, but that large-scale formal considerations are marked by different modal types for each of the two *partes* of the motet. The sequence text of *Praeter rerum seriem* consists of three double versicles (each versicle is tripartite) like *Gaude virgo mater Christe. Praeter rerum* is set on a much larger scale but the two motets employ a similar juxtaposition of the *re-fa* and *re-la* modal types. *Gaude virgo* uses contrasting types at the level of line of text, *Praeter rerum* at the level of verse-groupings and thus *pars.* The other sequence motet in the *Re (G)* tonality, *Victimae paschali laudes* (*Werken* 26), also employs *re-la* and *re-fa* modal types in each of its *partes.* Mattfeld (1959:105-7) and Osthoff (1965:II,25-7) among others outlined the cantus firmus distribution in *Victimae paschali laudes.* As Osthoff pointed out, the division of the chant is 'asymmetrical' but allows the chanson melodies quoted in the superius to act as a gloss on the sequence: *D'ung aultre amer* in the *prima pars* ('Victimae paschali laudes); *De tous biens plaine* in the *secunda pars* ('Dic nobis Maria').

Krantz suggested that in spite of the use of pre-existent melodies of different modes, it was not 'Josquin's intention to contrast authentic and plagal here, but rather to mix them quite thoroughly' (1989:204) . However, the strict incorporation of contrasting pre-existent melodies in the superius does set up clearly contrasting modal types in each *pars* of the motet, as the reductions in Example 4.32 illustrate: a *re-la* type in the *prima pars* and a *re-fa* type in the *secunda pars.*

Though *Praeter rerum seriem* and *Victimae paschali laudes* are different in many respects, they share an important common denominator: both are based on

Mode 1 sequences which are stated primarily in the tenor, and this may be responsible for the similarity of tonal profile. Contrasting *re-fa* and *re-la* modal types is also a feature of the other sequence in this tonality, *Gaude virgo mater Christi.*

Durational Schemes and Modal Types

Illibata Dei virgo nutrix (*Werken* 27) was used above to demonstrate the *re-la* modal type. In this motet, the modal type is directly connected to formal considerations growing out of the scaffolding solmization ostinato.[60] The motet integrates the ostinato into the text and musical texture at the phrase 'Salve tu sola amica, consola *la-mi-la* canentes in tua laude'.[61]

The regular placement of cadences in the *prima pars* marks clear six- and nine-bar groups (with two variants which balance each other in the overall mensural scheme); the nine-bar, three-note ostinato is stated three times, emphasizing the mensural perfection of the motet on three levels in 81 bars.[62]

Figure 4.5: Mensural scheme of *prima pars, Illibata Dei virgo nutrix*

bar groupings:	6	+	6	+	6	+	9	(+1)	+	9	+	9	+	6	+	5	+	9	+	6	+	9
cadence:			G		G		G			G		G		G		G		B^b		D		G		G
tenor ostinato:								x								x								x

The *secunda pars* divides into two nearly equally into units of 58 and 52 bars each (of differing mensurations) and the first half consists of three subsections,

---

[60]Dammann (1953:23-6) outlined the distribution of the ostinato, also illustrated in Sherr (1988:438).

[61]Musicologists have directed attention to this motet primarily because of the biographical information its acrostic text may hide, and secondarily in the context of the sphere of works in which it resonates (e.g. Antonwycz 1976, Sherr 1988, Milsom 1989, and Brothers 1991).

[62]Elders (1969.170-1) noted the significance of the number nine in the *prima pars* and suggested a symbolic interpretation.

marked by the ostinato into 24, 18, and 16 bars.[63] The first of these (bs 83-106) overlaps four-bar phrases between voice pairs.[64] Repetition and the single formal cadence to G punctuate the section. Its opening borrows the *Re(D):la-fa-la* pattern, and extends a static D/A fifth concluding with the *Re(G):re-la* modal type (see Example 4.33). The following eighteen-bar section (bs 107-24) emphasizes motivic conciseness, moving from a four-note falling fourth motive, to a pair of three-note motives (first introduced in b. 98), to the two-note solmization declamation: 'ut-sol' (see Example 4.34).[65] Again the effect is of static extension, first of the G-A bassus/contratenor combination (bs 112ff) and then of the reiterated bassus 'ut-sol' motive.[66] The third section of the *secunda pars* (bs 125-40), in triple mensuration, shows a regularity of phrase length similar to that of the *prima pars* as a whole.

Figure 4.6: Mensural distribution in the *secunda pars*, bs 125-40, *Illibata Dei virgo nutrix*

bar groupings: 4 + 4 + 4+ 4
cadence: G G G G
(tenor ostinato on the second and fourth bar of each group)

---

[63]Sherr divided the *secunda pars* into four sections based on the ostinato; Milsom (1989), suggested less convincingly a tripartite division based on textual structure. Neither observed the large-scale balance of the glossed 'Ave Maria' which concludes the motet and the rest of the *secunda pars*.

[64]The ostinato determines the phrase overlap: contratenor I/bassus entries coincide with ostinato entries.

[65]See the declamation of the same text to the same motive in *Praeter rerum seriem*.

[66]The same features (an extended oscillating bassus and bassus reiteration of the 'ut-sol' motive) are shared by *Virgo prudentissima*, as is the text 'pulchra et luna, electa ut sol'. Antonowycz (1976) catalogued the melodic kinship of *Illibata* with other works by Josquin, suggesting that the motet was a 'melodic self-portrait'. He concentrated on the *prima pars* and drew his references almost entirely from the masses. Many of the references that Antonowycz cites may be viewed as generic characteristics of the *Re(G)* tonality, and numerous other examples by Josquin as well as other composers could be adduced as the basis of such references. Antonowycz makes no mention of the shared text and motive of *Illibata* and *Virgo prudentissima*.

The conclusion of the *secunda pars* (bs 141-93; Example 4.35) also comprises four subsections which group the ostinato entries in pairs and the ostinato formula now consistently supports cadences. Large-scale repetition defines this section. Two twelve-bar units are repeated in reverse order (with an added cadential extension) that matches the text repetition:

Figure 4.7: Closing text and musical repetition, *Illibata Dei virgo nutrix*

Ave Maria, mater virtutum,	A
Veniae vena, ave Maria	b
Gratia plena, Dominus tecum.	b
Ave Maria, mater virtutum.	A
Amen.	ext.

The 'b' phrase introduces a variant of the fourth motive typical of *re-la* motets (often occurring near the end of a motet)[67] which is a simple variant of the 'A' phrase which itself makes use of repeated motivic material.

Repetition[68]

The discussion of *Illibata Dei virgo nutrix* leads directly to a consideration of

---

[67]See, for example Judd (1992a:Example 6.11).

[68]See also the discussion below of *O Domine Jesu Christe* (Ex. 4.46), *In exitu Israel* (Ex. 4.73), and *Qui habitat* (Exs 4.78 and 4.79). Brown's recent assessment emphasizes the significance of repetition in Josquin's motets:

> 'Josquin achieves his astonishing coherence by devising simple, rational formal schemes, and by filling them and bringing them to life with strongly directed melodic lines that rely heavily on judicious but almost invariable varied repetitions, not only of motives that enhance textual parallelisms, but also of whole phrases of counterpoint that give the music shape and focus, and of melodic gestures that engender a sense of forward motion and eventual resolution.... Moreover, Josquin shapes many of his motets either by repeating musical material at important junctures, or by specially preparing arrivals at formally significant cadences, techniques that have not received sufficient critical attention in discussion of the music of Josquin or of any other composer from the late fifteenth or sixteenth centuries' (1991b:200-201, 206 n 19).

repetition as a formal and structural determinant, which I would like to illustrate by returning to *Praeter rerum seriem*. Every commentator on this motet has observed its predilection for repetition and intensive manipulation of motivic material.[69] Krantz, citing Meier (1956:80-3), described the motives of the motet as '*redictae*', but then countered by observing that the repetitions did not serve the usual rhetorical conventions of such devices, but share in common 'the mode they present' (1989:184). The designation 'redictae' obscures the structural significance of these devices and the context of such repetition, especially in works for five and six voices. Repetition is a basic element of *Praeter rerum seriem*, and an understanding of its use in the motet informs an understanding of coherence. Repetition is, of course, one of the most characteristic features of sequence chants, and the motet plays on that in the distribution of the chant in the texture, both in individual phrases and in linking verse pairs through similar chant distribution. *Praeter rerum* provides a veritable catalogue of the means by which repetition may be used as a formal device. This approach to composition typifies the five- and six-voice motets, and is especially common in the six-voice works which incorporate a chant cantus firmus in longer note values. The constructivist approach of the opening bars of the motet (see Example 4.36) illustrates the technique for which Rifkin (1990) coined the term 'motivicity', with the added complication of the presence of the chant melody in *Praeter rerum seriem*.[70]

Verses 1 and 2 set up a contrast of motivic interplay and textural alternation which is illustrated in Example 4.37. The opening of the motet develops the motivic web of the voice pair which accompanies the opening tenor statement by adding

---

[69]Krantz (1989:182-201) provides the most extensive discussion. See also Sparks (1963:389) and Osthoff (1965:II:72-6).

[70]Compare the diagram in Example 4.36 with Rifkin's discussion of the opening of *Huc me sydereo*.

another voice pair and incorporating motivic material in the tenor following its chant statement. The underlying framework is essentially a static G-g octave which moves inward to a d-f third. In the first four-bar statement, motivic and durational considerations suggest that the extension of the bassus G is accompanied by an emphasis on B-flat. The added bassus counterpoint for the superius entry moves the emphasis to C. This type of essentially slow-moving outer-voice framework is common among works built up of small motives, and as in bars 3-4, those motives are broken down into even smaller cells and used sequentially. The rhythmically compressed statement of verse 2 uses similar motivic material, but relies instead on literal repetition by new voices. The six-voice texture provides two four-voice statements, the second an octave higher than the first.

The opening of verse 3 (Example 4.38) inserts a statement of the chant melody in the altus transposed up a fifth between repetition by contrasting voice groups of an imitative counterpoint which is itself based on the immediate repetition of a small motive. A similar procedure characterizes the opening of the fourth verse (Example 4.39) when the chant is moved to the bassus. The setting of the fourth verse uses increasingly sophisticated overlapped repetition to turn an essentially four-voice schematic into a six-voice texture.

Repetition at a broad level characterizes the final verses of the motet, which also incorporate internal repetition. The use of literal repetition (with or without voice exchange) on a large scale associated with a change to triple mensuration at the conclusion of the motet is a feature of both *Praeter rerum seriem* and *O virgo virginum* (see Example 4.40).[71] Indeed, such repetition provides the primary means of closure, especially for motets for five and six voices.

---

[71]Osthoff (1965:II,76) linked *O Virgo Virginum* and *Praeter rerum seriem* on several counts: both motets use a complicated combination of alternating *cantus firmus* and imitative

Motivic construction[72]

As the discussion of *Praeter rerum seriem* indicated, the placement of plainchant has ramifications for the modal type; the six-voice texture in which that modal type operates influences the motivic construction of the free voices. *O virgo virginum* uses a complex alternation of short phrases, marked by clear cadences and repetition, which are contrasted with expansive chant statements accompanied by a contrapuntal texture of inner voices which avoid cadences. In two notable sections (see Example 4.41), outer voices frame almost frenetic activity of inner voices; the contrapuntal shape is defined by a simple bassus counterpoint to the superius chant, and tonal units correspond to *cantus firmus* phrases.

The chant itself increasingly serves as the basis of motivic material, as Figure 4.8 suggests.

---

counterpoint; they share the same tonality and are set for six voices in two *partes*; the *prima pars* of each opens with the three lowest voices, the *secunda pars* with the four highest voices; and the motets share a textual and liturgical affinity.

[72]See also the discussion below of *Memor esto verbi tui* (Ex. 4.65).

Figure 4.8: Distribution of chant in texture, *O virgo virginum*

Text	Voice(s) With Chant
O virgo virginum	**T // S**
(quomodo)	B2,T,CT2,CT1
quomodo fiet istud	**S** (B2,B1)
(fiet istud)	CT1
(quia)	T
quia nec primam similem	**S**
(nec primam similem)	//T
visa est	**T,S**
nec habere sequentem	**T // S**
(-tem)	(CT1,B1)
Filiae Jerusalem	**S** (CT2),**T** (B1)
quid me admiramini	**S**
divinum est	B2 (B1),T,CT1,CT2 (CT1),**S**
mysterium	B1,CT1 (T),B2,**S** (CT2),T
(CT1),	
	S (B1),(B2)
hoc quod cernitis	**T** (CT1) // **S** (CT2)
	T (CT1) // **S** (CT2)

// indicates repetition by different voice groups (as opposed to overlapped imitation or a new contrapuntal framework);

( ) indicates a partial statement, or imitation at a fifth above;

Text phrases and voices in **bold** are the primary chant statements

The motet also makes use of the chant throughout the texture in a quasi-motivic manner, most characteristically in imitation rising from the lower voices and completed by a full statement in the superius (see Example 4.42). In all cases, these motives taken from the chant, are those most characteristic of the *Re* tonality and *re-*

la modal types. One final example (Example 4.43) will illustrate the motivic construction in this motet. The rising third, in its most usual rhythmic form, is used as a basic cell of sequentially overlapped motives supported by fifth motion in the bassus, which also typifies the patterns seen in *Re(G)* motets: [D]-G-C-F-B-flat leading to a basizans cadence on the final.

Imitative and cadential structure. Motive and imitation are closely related compositional techniques which may create tonal focus. However, as the motet *Virgo salutiferi* demonstrates, cadences and melodic shapes define tonal focus far more consistently than the pitches on which such passages begin; literal imitation is prevalent, even when it leads to an extended series of fifths, as the sequential use of motives in Example 4.43 suggested. Imitation which emphasizes the final most often occurs at the opening and conclusion of a motet.

The tonal patterns of imitation in *Virgo salutiferi*[73] vary greatly in the three free voices; imitation in those voices occurs primarily when the chant is not sounding. Imitation is most prevalent in the *prima pars* (which has the longest sections in which the chant voices rest, corresponding to the longer note values in which the chant is set in that *pars*) and exploits the greatest number of possibilities of tonal disposition of imitative material. Table 4.5 catalogues the opening note of each point of imitation and also shows chant entries.

---

[73]Aspects of the motivic construction of *Virgo salutiferi* were discussed above. Like another mensuration motet, *Huc me sydereo*, many points of imitation open with repeated note motives. See the discussion in Chapter 6.

Table 4.5: *Virgo salutiferi*, Intervals of Imitation

Bar	*Prima pars*	Bar	*Secunda pars*	Bar	*Tertia pars*
1 9 16 21 26 41	G/G/G repeated D/D/D A/D/G C/F/F (B^b)/G/D F/B^b repeated D/G repeated B^b/E^b *Ave Maria*	112 121 140	C/F/B^b D/(F/F) *Ave maria*	174 182	C/C/G *Ave maria*
52 62 75 78	F/B^b/F *gratia plena* F/B^b *gratia plena*	148 152 154	D/A D/A *gratia plena*	185	*gratia plena*
83 87 92 97 102 107	A/D D/G *dominus tecum* C/C/G *dominus tecum* G/G/(D)	158 162 167	D/D D/G/D *dominus tecum*	188	*dominus tecum*
				194 198 200 201	*benedicta tu* B^b/B^b/(B^b) *in mulieribus* F/C *in mulieribus.* *Alleluia.*

Lowinsky (1968:III,200) suggested that the opening bars of the motet were an 'afterthought', basing his conclusion on what he deemed to be the 'greater coherence and consistency of motion' from bar 9 forward. Lowinsky did not mention one of the strongest reasons that the opening bars stand apart from the rest of the motet: their closed imitative framework. These repeated points of imitation are the only ones in the motet which use imitation at the unison and octave in all three voices. In every other imitative entry involving all three 'free' voices, at least one other voice enters at a fourth or fifth above or below. Extended imitative entries are characteristic of the motet. This is especially notable in bs 9-41 of the *prima pars*. The imitations move as far through a falling fifth cycle as any Josquin motet: A → D → G | C → F | B^b→

E^{b} in a section which is notable for its lack of cadences. In moving to close the section and prepare the entry of the first phrase of the cantus firmus, a falling third motive which is itself repeated twice at intervals of a third below reinforces the F-B^{b} area which is suggested by the opening of the chant. A clear cadence to G in all three voices, employing an ornamental figure characteristic of the cadences in the *prima pars* marks the end of the section. In each segment, the pitch concluding the bassus statement of the imitative duo begins the next point of imitation, as illustrated in Example 4.44. Thus the segment proceeds in falling thirds to the final, breaking the sequence at that point. Whether or not the first nine bars were an 'afterthought' they provide a tonal context for the wide-ranging imitation of the next 30 bars. The conclusion of the *tertia pars* (see Example 4.45) equally suggests tonal 'framing' which balances the strong focus on G in the opening. The changed texture accompanying the chant phrase 'benedicta tu in mulieribus' articulates an extended concluding section with reiterated cadences on G which culminates with the shared text 'alleluia'. Both the opening and the conclusion articulate a *re-la* modal type.

* * *

In this section, I have focused on formal determinants and their relationship to tonal coherence through extended attention to individual motets. In Chapter 3 and here, I have suggested that modal types most frequently appear at levels corresponding to formal divisions: phrase, verse, verse group, *pars*, and motet. The sequence motets in the *Re(G)* tonality use this convention in a particular way, alternating *re-fa* and *re-la* modal types at the level of *pars*. Both *Victimae paschali laudes* and *Praeter rerum seriem* reflect the conventions of pre-existing melodies in the superius, but reinforce the modal types suggested by these melodies.

With the exception of *Victimae paschali laudes*, all of the examples I have cited in this section are drawn from five- and six-voice motets: *Illibata Dei virgo nutrix*, *Praeter rerum seriem*, *O virgo virginum*, and *Virgo salutiferi*. A predilection for repetition, motivicity, and sequential overlap of motives, while present in many four-voice motets, is especially characteristic of the motets for five and six voices. This results primarily from compositional techniques which extend a four-voice texture to six voices through repetition in new voices and overlap of voice pairs. Interestingly, the (four-voice) psalm motets discussed below show a similar use of repetition and sequential overlap of motives. Only the five- and six-voice motets rely on extended, literal, immediate repetition for closure at the end of a motet.[74] These motets also reinforce the outer-voice framework that I have suggested for modal types, with their plentiful examples of near static extension in long notes by superius and bassus framing frenetic motivic activity of inner voices.

Extended Motets and Tonal Coherence

The motets *O Domine Jesu Christe*, *Vultum tuum deprecabuntur* and *O admirabile commercium* pose special questions of genre and tonal / textual coherence that argue for a special consideration of these works together. The index of the only source of *O Domine Jesu Christe* (*RISM 1503/1*) labels the motet 'Officium de Passione' and the print leaves no doubt in its presentation that this is a five-part motet.[75] The seven motets of the *Vultum tuum deprecabuntur* cycle belong to the *motetti missales* tradition, and *RISM 1505/2* treats them as independent but related

---

[74]See Tables 4.1, 4.3, and the discussion following on the number of motets for five or more voices, their text types, and so forth.

[75]On an equal scale with *O Domine Jesu Christe* in *RISM 1503/1* is Josquin's *Qui velatus facie fuisti* and Compere's *In nomine Jesu* (labelled 'Officium de Cruce' in the index). For a recent evluation of these motets in relation to votive masses, see Brown (1990).

pieces. The motets setting the five antiphons beginning with *O admirabile commercium* are related on textual grounds and I will argue that they are also musically related. Thus these three works form a continuum from multi-partite motet *(O Domine Jesu Christe)* to *Motetti missales* (*Vultum tuum deprecabuntur*) to a motet cycle connected at a broader level (*O admirabile commercium*) and I will discuss the works individually in this order.

O Domine Jesu Christe

Musical and textual parallels, as well as textural procedures, create a sense of overall ordering within the five *partes* of *O Domine Jesu Christe* (*Werken* 10).[76] The parallels in the first three meditations, indicated by italics in Figure 4.9 set up the tonal ordering of the motet as a whole.

Figure 4.9: *O Domine Jesu Christe*, text of first three *partes*

O Domine Jesu Christe	*O Domine Jesu Christe*	*O Domine Jesu Christe*
adoro te in cruce pendentem	*adoro te in*cruce vulneratum	*adoro te in* sepulcro positum
et coronam spineam in capite portantem:	felle et aceto potatum:	myrrha et aromatibus conditum:
deprecor te	*deprecor te*	*deprecor te*
ut ipsa crux liberet me ab angelo peinitente.	ut tua vulnera sint remedium animae meae.	ut tua mors sit vita mea.

Cadences are frequently set apart by fermatas and formed by caesuras as in the elevation motets, rather than through melodic patterning; 'formal' cadences are few and cadences are to wide variety of pitches. Nevertheless, and in spite of the primarily homophonic texture of these three *partes*, there is still a strong sense of a two-voice framework which underpins the musical structure. Formal cadences and the 'strong' S/T/B cadential voicing become more prominent as the motet progresses.

---

[76]Drake (1972:342-53) provides the most detailed discussion of the text, a late fourteenth-century meditation on the Passion, and the parallel musical settings occasioned by the textual parallels of the first three *partes* of the motet. He suggests that while the clear textual declamation of the motet might be termed 'humanistic', it might better be described as 'Franciscan' (:348).

The *prima* and *secunda pars* of the motets each use one 'structural' (S/T) cadence. (See the cadential profile in Appendix 2.) They occur at parallel points and both are to the final, D, over a B-flat in the bassus. In the *prima pars*, two other cadences to D occur at the other major textual divisions—the ends of the third and final lines of text. Both lack the defining *tenorizans* motion, and substitute a *basizans* instead. Successive cadences in the *secunda pars* similarly omit the defining *tenorizans* motion. The move to A at the end of the *secunda pars* is reiterated in the *tertia pars* with a series of cadences to A. The *quarta pars* moves from emphasis on A to formal cadences on F. The cadence at the end of this *pars* confirms an increasing emphasis on the structural cadential voicing. The *quinta pars*, the longest section of the motet, contains the most varied cadential profile and the greatest number of formal cadences, strongly reinforcing the sense of propulsion through the motet. It moves back to an emphasis on A and D, with three strong formal cadences at its end. The introduction of imitation in this *pars* of the motet also makes explicit the two voice *cantizans / tenorizans* framework underlying cadential motion (see the cadential profile in Appendix 2).

The use of repetition reflects a similar cumulative design moving from a characteristic two-sonority succession in the *prima pars*. A similar succession opens the *secunda pars*. The ending of the *tertia pars* extends the technique to a three-fold sequential repetition while the *quarta pars* makes use of a slightly expanded and varied repetition at its conclusion. Sequential repetition is used to the greatest extent in the *quinta pars* with three sections of three-fold repetition, the final of which is partially extended in a statement of the *re-la* modal type (see Example 4.46). The superius of the motet has a range which would be described in modal terms as plagal; indeed the superius clearly outlines the octave a'-a melodically (e.g., bs 26-43; 163-76; 207-25). The outer *partes* employ a *re-la* modal type. The relatively small

dimensions of each *pars*, coupled with the predominantly homophonic texture, sets the framework for statements of the modal type, all at the relatively local level of nine to ten bars, which corresponds to a line of text, as example 4.46 illustrates. Similarly extensions of the *la* of the modal type are also at a relatively local level and accomplished by repetition, as reductive graphs of excerpts from the *quarta* and *quinta partes* illustrate (see Example 4.47). While the interior *partes* move toward a contrasting *re-fa* modal type (and the associated cadential emphasis on F) (see Example 4.48), this modal type is never firmly established, lacking the *basizans* confirmation prominently associated with the *re-la* modal type in this motet.

The cadences of its individual *partes*, as well as its length, set *O Domine Jesu Christe* apart (refer to Table 4.2); it accords well with the *Re(D)* tonality and the conventions associated with the elevation motets based on similar texts. A clear two-voice framework is basic to the motet—a framework that can move among pairs of voices, regardless of the prevailing texture. At points of structural significance, the superius and tenor are accorded those roles. That framework, along with a cadential hierarchy of pitch and cadence type, creates a progression through the five *partes* of the setting. The level of the phrase is clearly the compositional unit, but these are placed in a larger structural context by the formal framework of textual parallels and musical repetition.

Vultum tuum deprecabuntur

The only source that transmits all seven motets of the *Vultum tuum deprecabuntur* cycle (*Werken* 24) is Petrucci's *Motetti libro quarto* (*RISM 1505*^{2}). Noble (1985:16-17) and Ward (1986:505-8; 519-20) outlined the likely position of the cycle in the *Motetti Missales* repertory and speculated on its incomplete transmission in other sources, most notably *MilD 4*. Ward observed a careful

distinction in Petrucci's treatment of *Vultum tuum* as a motet cycle rather than a multi-partite motet.

A tonal analysis of *Vultum tuum* reinforces a view of *Motetti missales* as distinct but related motets. The motet which opens the cycle begins with the text and melody of the Introit common to Marian feasts and the Marian votive Mass and then moves to apparently free text and composition. The other texts in the cycle comprise a pastiche of Marian antiphons and hymns, common supplications to the Virgin, and the litany. The final motet of the cycle as ordered by Petrucci, *Christe, Fili Dei,* glosses the Agnus Dei and is connected to the Marian cycle by its final invocation:

> Christe, Fili Dei,
> *precibus sanctissimae matris*
> adjuva nos,
> et tolle tribulationem nostram.

Urquhart (1982:124-6) considered these motets as a multi-section work rather than a motet cycle, suggesting a stronger relationship than I will argue for here, but his general conclusion about tonal ordering remains valid: namely, there is an increase in complexity reflected by choice of cadence tones which leads to the fourth (and central) motet. The first motet cadences only on G and D, the second adds A and F, the third adds B-flat, and the fourth uses the greatest array of cadences: G, D, A, F, B^{b}, and C. Macey (1989:41, Table 2) noted the formal parallels of the mensural schemes of five of the motets (and *Ave Maria ... benedicta tu).* (See the cadential profiles in Appendix 2.) In spite of the closed tonal scheme of each motet (characteristic of *Motetti missales*) an overall tonal plan which coincides with the cadential ordering observed by Urquhart is evident. The outer motets of the cycle[77]

---

[77]For ease of discussion, Petrucci's ordering (and that of the *Werken*) is retained here. Macey (1989:45-6) suggests that the placement of the sixth and seventh motets be reversed because *Ora pro nobis* (no. 6) concludes with a condensed Doxology and Amen; this would be appropriate

share the same restricted overall range; inner voices overtake the superius near the opening of the motet in both (see Example 4.49). The result is a *re-fa* modal type. In *Vultum tuum*, this corresponds with the first half of the motet, based on a plagal (mode 2) chant stated in the superius. A characteristic recurring altus / bass imitative figure, *la-ut*, introduces a shift to the *re-la* type common to the interior motets of the cycle (see Example 4.50). Sequential extension and a greater motivic emphasis establish the final cadential *re-la* modal type of the opening motet (see Example 4.51). Like *Vultum tuum*, *Christe, Fili Dei*, the concluding motet, also incorporates a pre-existing melody; the altus quotes the superius of the chanson *J'ay pris amours* (Taruskin 1982). The motet's use of repetition in the *bassus*,[78] and sequential cadences from D to G,[79] provide a sense of finality that supports Petrucci's placement of this motet as the final one of the cycle. The three-part form of the *Agnus Dei* is respected in the musical design through repetition which opens each section and a tonally contrasting middle section (see Example 4.52). As Urquhart (1982:127) pointed out, the deployment of cadential pitches parallels that of the cycle as a whole, with cadences to three, four, and then five pitches and an array for this motet which includes G, D, B♭, F, A, and C. The final of the *J'ay pris amours* melody is shifted

---

for a final motet *loco Deo gratias*, and should then be preceded by *Christe, Fili Dei* (no. 7) which is clearly intended *loco Agnus Dei*. Given the incomplete transmission of the cycle in any source but *RISM 1505/2*, the likelihood that Petrucci's version may also be incomplete (it contains only seven rather than the usual eight motets), and uncertainty surrounding the *Motetti missales* repertory, this appealing hypothesis remains open to question. Macey's suggestion is weakened by textual and musical connections between the end of the fifth motet in Petrucci s order, *Mente tota*, and the sixth, *Ora pro nobis* (see below), and the relationship of the framing motets as Petrucci has ordered the set. Macey's argument makes possible a liturgical understanding and reconstruction of the cycle, but Petrucci's order reflects the musical connections of the motets.

[78]Bs 513-515 = 516-518 = 519-523.

[79]See especially bs 578-end.

by addition of a flat signature to A *la mi re.* Thus the cadence pitches of the melody—D, F, A, C, D—suggest the *Re(D)* tonality. The motet's opening point of imitation expands the opening of the previous motet, *Ora pro nobis*, which is in turn related to the litany tone which concludes *Mente tota*, the fifth motet.

The second motet of the cycle, *Sancta Dei Genitrix*, opens with a clear statement of the *re-la* modal type. The motet consists of a sectionalized structure defined by textural and cadential markers; within each section, a different means of extension is used. This motet also extends the superius register to f^2 which is common to the inner motets of the cycle. This superius highpoint is reached only once in *Sancta Dei Genitrix*, and suggests the upper *re-fa* type that will be used with it in later motets (see bs 105-110 in Example 4.53).

The opening of the third motet, *Intemerata virgo*, also immediately states the *re-la* modal type. The figure F-G-B^b-A recurs as the opening of points of imitation and coincides with tonal emphasis on B^b (see bs 149-156, 175-183). Also like *Sancta Dei Genitrix*, the superius high point f^2 is reserved for the penultimate section of the motet; it is the culmination of the rising triple mensuration section and now reached twice in the motet. Local statements of the *re-fa* modal type associated with it are followed by clear statements of the *re-la* modal type (see bs 184 - end).[80]

By the fourth motet, *O Maria*, the f^2 registral highpoint is clearly established, and the motet moves to it immediately along with cadences to F (bs 221-239). The use of modal types characteristic of the *Re* tonality at two tonal levels (i.e. *Re(G):re-la* and *Re(D):re-fa*) results in the melodic outline of a seventh. This figure, relying

---

[80]Like *Sancta Dei Genetrix* and *Intemerata virgo*, *Ave Maria ... benedicta tu in mulieribus* is a *re-la* motet, and Macey's suggested placement of the motet after *Intemerata virgo* would be consistent with the tonal plan of the cycle. It is however, the only motet of this group to use the upper limit of g^2 in the superius, and its distribution of cadence tones is more conservative than the motets which would presumably surround it in the cycle.

on overlapping hexachords is a characteristic one for *Re(D)* pieces, but less frequently seen in *Re(G)* works.[81]

Figure 4.10: Overlapping hexachords

				RE	mi	***FA***
RE	mi	fa	sol	***LA***		
G	A	B^b	C	D	E	F

The extensive sequential use of imitative material sets this motet apart from the rest of the *Vultum tuum* cycle, as does its lack of mensuration change. As Novack (1976:323-4) noted, the sequential use of imitative material results in 'circle of fifths' motion. This particular cadence plan is unparalleled not only by other motets in the cycle, but by any other motets in Josquin's *oeuvre*. As shown in the cadential profile of the motet (see Appendix 2), it is here that C, the infrequently encountered cadence tone in this tonality, occurs. As I have suggested above, such 'cycle of fifths' motion is not uncommon, but the cadential emphasis attached to it here is.

The most famous motet of the cycle, to judge by its transmission, *Mente tota*, begins like *O Maria*, with immediate movement to f^2, but the cadential focus is shifted to A (bs 300-312 and 358-362). While *O Maria* uses extensive repetition of imitative motives in melodic and harmonic sequence, *Mente tota* takes the *cantizans* cadence pattern as a motive. This section of the motet culminates in stepwise sequential resolution, also based on a syncopated motive, which is a simple elaboration of the *re-fa* modal type (see Example 4.54, bs 332-353). Repetition at different pitch levels is used in the section of triple mensuration to reinforce the *re-fa*

[81]The high clef setting of these motets makes this modal type available. Ultimately, it may be seen as an extension of the *re-la* modal type.

type at the two levels characteristic of the motet. The emphasis on the upper superius range has two effects: the first is the relatively frequent cadences on A that coincide with the superius emphasis on f^2; the second is the emphasis on the *re-fa* modal type, in a motet whose range would suggest an 'authentic' disposition when compared to the majority of motets set by Josquin in this tonality.[82]

The sixth motet, *Ora pro nobis*, also makes use of a composite *re-fa* modal type, as may be seen by the extension of the superius f^2 in bs 442-450, and again in bs 480-end. In every sense though, this motet (unlike *Mente tota*) uses conventional *re-fa* material: there is limited extension of d^2 and little play on the *re-la* type apart from short cadential passages (see bs 419-25 and 472-476); there are no cadences to A; there is a strong emphasis melodically and cadentially on B^b, and the superius incorporates the *fa-ut* extension of B-flat that is characteristic of *Re(G):re-fa* motets (see bs 462-468).

The vocal ranges, modal types, mensural schemes, imitative material, cadential plans, use of pre-existing material, and repetition all suggest connections between these motets. The motets are all capable tonally and textually of standing individually, and only Petrucci (*RISM 1505/2*) transmits all seven of the motets, as Table 4.6 illustrates.

---

[82]The discussion of this motet in Krantz (1989:219-23) points to the weaknesses inherent in attempting to explain Josquin's motets from a perspective of compositional 'modal presentation' and the difficulties encountered in viewing this motet in particular without the perspective offered by the cycle, in spite of its independent transmission. Problematic for Krantz were the relationship of the voice ranges, the apparent contradiction of the tenor and bassus ranges with a 'Mode 2' assignment, and the lack of cadences on B^b, which in his view undermined an assignment to Mode 2. He came to the contradictory conclusion that 'whether the mode is authentic or plagal, its function in text delineation is very clear in *Mente tota*' (:220).

Table 4.6: Transmission of the *Vultum tuum* motets

	I	II	III	IV	V	VI	VII
BarcBC 454			x	x			
BerlS 40021					x		
CambraiBM 125-8			x				
MilD 4			x	x	x	x	
MunBS 19					x		
PadBC A17	x		x		x		x
RegB C120					x		
SGallS 463					x		
SegC s.s			x				
UlmS 237		x	x	x	x	x	
VatS 26					x		
1505/2	x	x	x	x	x	x	x
1539/2					x		

The clef and register combinations of these motets define a sub-group among the *Re(G)* tonality. Their clefs are other than the usual c1 - f4, with the result of a notated vocal distribution roughly a third higher than the norm. The only other motets which employ high clefs are two hymn settings, the *Salve regina* settings,[83] and *Ave maria ... benedicta tu.* Macey (1989) suggested that *Ave maria* might belong to this cycle, and his argument is compelling. The similarities among this group of motets, as befits the *motetti missales* tradition, are primarily generic, and as the source tradition suggests, partial transmission of the cycle was the norm. This *motetti missales* cycle conforms to the conventions of the genre: uniformity of clefs, mode, and finals, textual unity, thematic connections, and similarity of mensural treatment.

An Antiphon Cycle: *O Admirabile commercium*

Unlike *Vultum tuum*, the motets that make up the *O admirabile commericium* cycle set five antiphons with a specific liturgical association to the Feast of the

[83]The high clefs in *Salve regina* are necessitated by the plainchant paraphrase in the superius, and seem to be related to conventions of setting this text. See the discussion of the hymns below.

Circumcision and the Office for the Blessed Virgin.[84] Each refers to its plainchant model; the chants belong to Modes 6, 3, 4, 1, and 2 respectively. Lowinsky inserts the indicators *secunda pars* and so forth in his edition of the *Medici Codex*, but I would suggest that it is more defensible to treat this as motet group or cycle, rather than a five-part motet (such as *O Domine Jesu Christe*). However, *O admirabile commercium* represents a more complex situation than *Vultum tuum*. Although some of these texts were incorporated by composers in cycles which are apparently *motetti missales*, this cycle does not conform to the conventions of the *motetti missales* repertory. Most notably, the motets do not share chants of the same mode and final. Cummings (1990:13-30) summarized the difficulties regarding the transmission of the cycle and the implications of its variant readings for views of *musica ficta*.[85]

Elders (1976:536) and Noble (1985:21) remarked on the prominence of the chant in these motets, and both suggested the possibility of liturgical function. Elders described the chant as paraphrased primarily in the tenor, while Noble observed the prominent use of the chant in the upper voice—one of his criteria for suggesting functional associations. The chants Josquin incorporates are near matches with the chants found in the *Liber usualis*.[86] *O admirabile commercium* stands out as the only

---

[84]On the use and sources of these antiphons, see Ward (1986:509-10, nn 34-5).

[85]The complete cycle occurs in *CambriP 1760*, *FlorBN II.I.232*, *FlorL 666*, *VatS 46*, *RISM 1521*^{2}, and *RISM 1538*^{3}. The first, fourth, and fifth motets are in *ParisBNC 41*. As will be shown below, on tonal terms, these are the three motets most capable of standing independently. Cummings concluded that the distinct versions of the motets from traditions of equal stemmatic authority argued against any single deployment of accidentals taking precedence. In brief, the source situation may be summarized thus: *FlorBN 222* transmits the motets with the fewest signature flats, tending toward only a signed B-flat in the superius, altus, and tenor, and including a signed E-flat in some of the motets in the bassus; the other extreme is *VatS 46* in which all voices of all motets carry a two-flat signature (see Cummings [1990:25-6]). Cummings concluded that uniform application of E-flats would 'impose a tighter tonal scheme on the work', but one which was not necessarily warranted.

[86]In an admittedly less than comprehensive search, I have not discovered a closer match for Josquin's chant. Elders notes that the opening variant in Lucca Ms 5 coincides with Josquin's setting (1976:536) but otherwise is the same as the *Liber usualis* chants. Bloxam (1991) is an eloquent

Mode 6 chant which Josquin sets with a B-flat (rather than F or C) final. Likewise, *Quando natus est* also stands out as the only Mode 3 chant that the composer set, but the settings of the Modes 4, 1 and 2 chants conform with other settings: flat signatures and finals on A and G respectively. The chant is used throughout in clearly marked phrases, usually 'at pitch' (that is, in the one-flat system) in tenor and superius, and imitated in full or partial statements at the fifth above or below in the other voice pair. Figure 3.2 (above) illustrates the chant distribution in the final motet *Ecce maria*, typical of the cycle as a whole. The paired voices implied by this chant treatment are used extensively throughout the cycle, as the opening of the first motet suggests (see Example 4.55).

There are occasional breaks from the imitative framework which stands behind the chant incorporation, and even apparent breaks from the chant itself which move to free and strongly motivic textures, discussed below in reference to *Quando natus est*. It would appear that Josquin approached the implied cadences of the chant melody with some freedom. When he avoided the cadence of the chant, the alteration tends to strengthen tonal focus, as in the passage from *O admirabile commercium* quoted in Example 4.56. The full chant statement is in the tenor alone, and, instead of the expected cadence to C, the phrase reinforces the cadences to B-flat which have surrounded it, before setting up a series of cadences a fifth apart in voice pairs which will lead to cadences on C for the next phrases of text. The chant is shown in parallel in Example 4.56.

---

advocate for the importance of locating appropriate contemporary and regional chant models; I am grateful to Professor Bloxam for sharing with me chant sources for some other motets. In light of some discrepancies between the *Liber usualis* chant and Josquin's setting, suggestions below about compositional alteration of the chant model must remain provisional given the qualifications I have suggested above about compositional manipulation of plainchant.

The *exordium* of *O admirabile* would seem to suggest an *Ut(B^b)* tonality, and Bergquist chose the first thirty-one bars of the motet as the subject of one of his voice leading graphs (1967:134-40).[87] Bergquist's 'middle ground' graph is reproduced in Example 4.57. The B-flat final is unusual, perhaps unique, among Josquin's motets.[88] The interior *partes* of two other motets terminate on B-flat; both of these motets are in the *Re(G)* tonality.[89] *O admirabile commercium* opens with an *Ut* modal type, but on F, not B-flat. The 'contrapuntal' support by a d-minor triad which obviously disturbs Bergquist slightly is in fact one of the conventions of the *Ut* tonality.[90] Viewing the opening bars as focused on motion toward F reinforces the *Ut* paradigm that is prominent in this motet. It also supports my contention of the importance of the *voces* for tonal coherence. First, these are patterns that focus on *Ut*, secondarily

---

[87]He described the opening voice pair as follows:

> The top voice does not allow these tones to express a B^b-triad throughout. The first D supports a D-minor triad (bars 1-9) with A and then F in the top voice. This triad constitutes a sort of introduction to the tonic, which appears only in bar 11. It is not unusual in any period for a composition to begin with a sonority other than the tonic, and this example shows what appears to be a typical application of that procedure in the Renaissance. In later periods, the tonic is more often approached directly or indirectly through the dominant, but here the introductory chord is contrapuntal rather than harmonic. It seems likely that a contrapuntal approach to the initial tonic may be more frequent in this period than later; here again the harmonic relationship does not assert itself so strongly as in succeeding centuries. (:139)

Within the Salzerian framework that Bergquist adopted, this explanation and description are not only adequate, but go far beyond any others that had been advanced for this music up to that point. Nevertheless, the framework he adopts, even with its numerous contrapuntal structural chords, colours his perception of the motet and seems to me to miss the essence of the tonal processes, processes that are reinforced by its conflicting signatures. Bergquist follows the Smijers edition and gives the motet with only a single flat in all voices; all sources of the motet have two flats in the bassus (see Cummings [1990:25]).

[88]If Rifkin (1991) and van Benthem (1989) are correct (and their arguments are compelling), then the only other motet with a B-flat final, *Absalon fili mi*, is not by Josquin.

[89]*Virgo salutiferi* and *Domine non secundum*.

[90]See Chapter 5.

but unambiguously is the focus on B-flat as final established. My interpretation of the passage Bergquist graphs is aligned beneath his on Example 4.57. There is no doubt that a strong point of articulation occurs at the end of the first line of text (b.31), but it is only in the ensuing bars that B-flat is clearly established as tonal centre. Josquin's alteration and strengthening of the cadence reinforces the parallels between these two phrases of chant. The opening phrase of chant suggests an *ut-mi* melodic orientation which is reflected in the polyphony. The cadential profile of the motet also suggests parallels related to the chant which are used as structuring devices (see Appendix 2.) Particularly noteworthy are the repeated cadential patterns in the central section of the motet: G / C / B-flat. These do not result from exact repetition, but a more generalized tonal repetition, which supports chant entries in the tenor with a cadence on G, follows the chant to cadence on C and then extends the cadence to B-flat derived from the obvious chant parallels (bs 50-4 = 67-71). Example 4.58 aligns the excerpts with the tenor on the top staff to highlight the chant parallels. Both framing cadences are weakened the second time, with the cadence to G supported by E-flat in the bassus (b. 68) and the cadence to B-flat over a G in the bassus (b.78). The final section of the motet reinforces the *Ut(B$\dot{b}$)* tonality and the *ut-mi* modal type. The sectional division of the motet reflects the distribution of chant phrases and the tonal direction of those phrases.

Tonal organization in the second motet, *Quando natus est*, is more difficult to analyze. Cadences to A, the chant final, are frequently supported by D in the bassus and chant terminations are apparently moved to D in at least three instances (bs 24, 65, and 90). Just as cadential support a third below is normative in the *Ut* tonality, support a fifth below is common in *Mi* tonality motets.[91] Cadences are for the most

---

[91]See Chapter 6.

part formal and reflect the paired voices of the texture (see the cadential profile in Appendix 2). The cadential profile points to the regular and balanced formal organization of the motet. The outer sections are of the same duration (16 bars) and marked by caesuras to triadic sonorities rather than stylized cadential motion. Three of the four inner sections follow a pattern of cadences to D followed by cadences to A. One section stands out with cadences to B-flat and G, shown in Example 4.59. The altus entry, following a cadence marking a new point of imitation, states the chant which is then imitated at the fifth below by bassus and superius. The tenor breaks the usual pattern by furthering the imitation (C / F // F / B-flat), followed by a varied repetition of the altus / bassus pair with accompanying superius counterpoint which is now completed by a tenor entry at the appropriate pitch level and a strong cadence. For the motivic treatment of 'descendisti' which follows, the chant is apparently abandoned.

This motivic section and the tonal emphasis placed upon it led me to suspect that the entire group of motets might be musically related. The figure which opens this point of imitation occurs in four of the five chants and is accorded extensive imitative treatment in the polyphonic settings. It closes *O admirabile*, and is used to extend the final cadence. As described above, it marks a unique alteration in the chant treatment in *Quando natus est.* It is used in the usual cadential entry and then in diminution and repetition in *Germinavit radix Jesse*, and it is the basis for the entire central section of the final motet, *Ecce maria.* These shared imitative motives are highlighed in Example 4.60. Other parallels among motets are also evident, for example the opening point of imitation and the use of declamation and repetition in parallel thirds in *Rubum quem viderat* and *Germinavit radix Jesse* (see Example 4.61).

Rubum quem viderat, the central motet, is the shortest (63 bars) and the most ambiguous in its tonal structure. Most of the cadences are ceasuras created by the overlapping entries of new points of imitation and lack the syncopated suspension formula. Additionally, there is little obvious order to the choice of cadence tones. The imitative procedure of the opening of the motet further muddies any sense of tonal order by moving in rising fourths: D /G //(G) / C. The overlapped points of entry create the effect of a continuous rising scale, shown in Example 4.62, comprised of three distinct species of fourth.

This is answered by voice pairs in rising fifths which eventually reach the final A: C / G // D / A. In this context, one section of the cadential profile (see Appendix 2) stands out: a pair of ornamented formal cadences to G. This phrase of chant is a *re-la* melody, and is set with a tonal clarity accorded no other phrase of the entire motet. Indeed, it must have been this pair of cadences that led Lowinsky to conclude that the ending on A was a 'surprise turn' (1968:III,132) since the ending of this motet, like the rest in the cycle, follows its chant model.

It is possible to see in these motets a large scale tonal ordering based on the *Re(G)* tonality, in which the chant implications of the individual motets are subsumed in a larger tonal ordering. Hence the otherwise inexplicable emphasis in *Rubum quem viderat* on a *re-la* type and interior cadence to G. At the scale of the cycle, the *Re* tonality operates as illustrated in Example 4.63. This is not a voice-leading graph; it simply summarizes the extended final cadences of each motet and shows how they fit a *Re(G): re-fa* modal type. As was described above, the most frequent way of extending the *fa* of a *re-fa* type is by 'tonicizing' it, exactly what happens in the opening motet of this cycle, which so strongly establishes B-flat. Likewise, when the *mi* of the *re-fa* type is extended, it is through reference to the *Re(D)* tonality and support with a lower fifth, as here. The final pair of motets have the strongest tonal

profiles, the most extended conclusions, the clearest formal order. Josquin tended to associate Marian texts with the *Re* tonality and with few exceptions set Mode 1 and 2 chants with a G final and B-flat signature (and variously implied and signed E-flats). Cadences of major sections (*partes*) of *Re(G)* motets to B-flat and A,[92] while not common, do occur. The composer's obvious preference for this tonality, and the manner in which the *O admirabile commercium* motets conform to its conventions, argue for viewing the motets of the cycle as tonally related, albeit on the most general level. A fa [supra la] / mi interchange is an incidental, but characteristic trait of the *Re* tonality, whether a one- or two-flat signature or local accidentals were used with a G final. That is not the case for any other tonality, in which the presence or absence of a flat signature would constitute a defining feature of the modal types associated with the tonality and the signature configuration of the *O admirable commercium* cycle also argues for viewing it in the context of the *Re(G)* tonality.[93]

Psalm motets

Table 4.1 suggested that the securely attributed psalm motets in the *Re* tonality stand apart tonally from motets based on other text types. Although numerous writers have at times described the tonal conventions of these psalm motets, namely their 'wrong endings', as 'text-expressive' devices, I wish to suggest here that they reflect more broadly the associations of these texts with psalmody than any particular affective connotation. There is no doubt that these works are motets, not functional psalm settings, but it is arguable that Josquin treated these texts (and

---

[92]On cadences to A, see the discussion of the psalm motets below.

[93]Aron, of course, would deal with this cycle as separate motets on account of the different modes of their distinct chants. The signature configurations and endings of the first three motets would place them outside his modal conventions in any case and it seems clear that his classification of the first motet of the cycle as Mode 6 reflects its chant basis.

others associated with a reciting tone) in a way that reflects a resonance of their plainchant conventions,[94] just as he respected the chant associations of other texts related to more melodic chant models. All four of the securely attributed psalm motets in this tonality set complete psalms; all conclude interior sections on the degree above the final; and all demonstrate features of local tonal focus which Meier (1956) described under Glarean's rubric 'Dorian ad Phrygian'. The opening half-verses and music of *Memor esto verbi tui* and *Qui habitat in adjutorio altissimi* return at the end of the motet in what Dahlhaus (1968/1990) termed a 'reprise' technique; *In exitu Israel* concludes with the doxology and antiphon associated with it.[95] An appearance of one or more recitational motives reminiscent of a psalm tone is common to these motets, although only *In exitu Israel* directly quotes a psalm tone for much of the motet.[96] Josquin's other psalm motets retain the most distinguishing tonal feature of psalmody: terminations on a pitch other than the final. This is not true of the Marian motets, which uniformly adopt a 'closed' tonal ending.[97] I would like to suggest a continuum of this group of psalms from *In exitu Israel*, which has the most direct connections to psalmody (psalm tone, full doxology, and antiphon at the end), to *Memor esto verbi tui*, (partial doxology interrupted midway with a literal substitution for the words 'sicut erat in principio' with the opening text of the psalm); to *Qui habitat* (no doxology but follows the 'reprise' scheme and tonal configuration of *Memor esto*); to *Domine ne in furore* (which sets a full psalm text and incorporates

---

[94]See the discussion of the gospel motets in Chapter 7.

[95]The psalm motets in the *Mi* tonality adopt a markedly different approach to those of the *Re* tonality. See Chapter 6.

[96]Macey (1991) argued convincingly for the association of this motet with a tradition of setting that particular psalm text with the psalm tone and antiphon.

[97]Nor is it generally true of the psalms appearing in late German sources. See the discussion of *Re* psalm motets *Levavi oculos* and *Mirabilia testimonia* in Chapter 8.

the tonal scheme of *In exitu Israel* without direct reference to a psalm tone.) These motets observe the verse structure of their texts by clear cadences, usually to the final, and textural contrast, but as will be shown below, the modal type operates at the level of verse and verse groupings, usually of three to five verses. Formal parallels, repetition, sequence, and motivic relationships create the larger-scale formal ordering of *pars* and motet. None of these motets use simple verse by verse repetition of a modal type as illustrated by *Dominus regnavit* (see Chapter 3). Contrasting, stepwise two- or three-note figures which serve as the basis of immediate, literal repetition and sequence are especially characteristic of these motets and normally occur near the centre of the motet as a whole or within verse groupings.[98] Figure 4.11 gives the distribution of motets according to primary modal types.

Figure 4.11: Distribution of *Re* Psalm motets by modal types

Re(G):re-la: *In exitu Israel*
Re(D):re-la: *Domine, ne in furore*

Re(D):re-fa: *Memor esto verbi tui*
Re(G):re-fa: *Qui habitat in adjutorio*

Thus the four motets represent the full spectrum of final and modal type available to the *Re* tonality and the closest interrelationships are between those motets that share a modal type. There is no doubt that these four motets form a distinct sub-group of the *Re* motets and the two things which set them apart—their texts and the endings of their *partes*—are directly related.

---

[98]The use of such figures is particularly characteristic of motets which set texts associated with reciting tones; see the discussion of the gospel motets in Chapter 7. It may also be a compositional technique associated with 'late' works. See the discussion of *Pater noster - Ave Maria* above. A four-voice texture is the norm for the psalm motets, and this technique may be seen as analogous to motivicity in motets for five and six voices.

Psalm tone and antiphon

Only *In exitu Israel* (*Werken* 51) makes obvious reference to the psalm tone. The motet sets twenty-seven psalm verses, plus the doxology and its concluding antiphon 'Nos qui vivimus'.[99] Like other polyphonic settings of this psalm, the motet incorporates the *tonus perigrinus*.[100] The tone is used at two pitch levels throughout, with either A or D as the opening reciting tone. It opens at the level of A in the superius with a canon a fifth below in the altus; the secondary reciting note of the tone, G, arrives through imitative entries at the fifth below: A / D : D / G. This imitative scheme of paired voices a fifth apart is central to the tonal organization of all four psalm motets, but only *In exitu Israel* suggests a direct connection of this imitative technique with psalmody. Simlarly, only *In exitu Israel* includes a doxology and antiphon and the inclusion of the antiphon coincides with the conclusion of the motet on its final. Three cadences to C are introduced in the final section of text, directly from the antiphon;[101] like other apparently anomalous cadences to C in a *Re(G)* tonality these reflect a precedent in chant.

'Reprise' technique and the 'wrong-ending' psalms

In Chapter 3, I used examples from *Memor esto verbi tui* and *Qui habitat* as illustrations of the *re-fa* modal type in *exordia* (Example 3.11). The opening of these motets and their interior cadence schemes belong unambiguously to the *Re* tonality,

---

[99]Psalm 113 with this antiphon formed part of Sunday Vespers *per annum* (Snow 1983:265), but this motet is unlikely to have been a 'functional' setting; Macey (1985:13-14 and 1991:174) suggested that the motet might have been intended for the *chapelle royale*, and pointed to settings by Mouton and Sermisy.

[100]Finscher (1962:61) gives a detailed distribution of the psalm tone.

[101]Krantz (1989:217) was unaware of the antiphon and erred in his conclusions as a result.

but the exceptional endings of each of the *partes* have inspired a wide range of interpretation.

Understanding the endings of these motets requires a distinction between 'final' and 'termination'. The sonority on which a motet ends need not necessarily represent a 'final' in a 'closed' tonal form. By termination, I mean, as did sixteenth-century theorists like Aron, simply the place where a piece ends, which may or may not be the 'final', the focus on tonal activity—theoretically the note on which a melody *should* end. As I have shown above, closure is created by a confluence of textural and temporal events as much as through tonal focus. The 'final' of the polyphonic complex is determined by a timeless pitch hierarchy of tonal focus generally on a *vox* (i.e. hexachord syllable) and on a *littera* (i.e. specific pitch); other factors, most notably liturgical associations of the text, may determine where a motet ends, which may or may not coincide with the primary focus of tonal activity which determines the 'tonality' of the motet.

The special role of *A la mi re* deserves consideration here. It is not coincidental that A is accorded a more prominent cadential role in these motets than in the *Re* motets generally. *A la mi re* can serve as the agent for local changes of tonal focus which have sometimes been described as 'modal excursions' and loosely linked to text-expressive purposes; viewed in a broader context, however, such procedures may actually contribute to larger scale tonal coherence.[102] Example 4.64 summarizes some possible changes of orientation. In its melodic role as a boundary of the first species of fifth and the repercussion of Mode 4, A acts as a frequent turning point between *D re* and *E mi* orientations. Similarly, A can act as a pivot through imitation at the fifth, usually in paired voices a fifth apart: D-A // A-E. Just

---

[102]See the examples from *Domine ne projicias me* in Chapter 3 (Example 3.15).

as it can facilitate the interaction of *D re* and *E mi* tonalities at a local level, if imbued with the authority of final in its own right, A can represent either a *Re* or a *Mi* tonality, depending on the governing hexachord as illustrated in Example 4.64.[103]

With a distinction between final and termination, the 'problem' of the endings of these motets evaporates.[104] While a text-expressive explanation for the end of *Memor esto verbi tui* like that advanced by Krantz (1989:232) is not implausible, the same does not hold true for *Qui habitat* which exhibits the same tonal conventions.[105] The common feature of these works is that both set complete psalm texts, and I believe that it is likely that the 'reprise' technique and the cadences which end the motets are tied to their texts, not in the sense of text expression, but by analogy with psalm tone endings. Of all of the chant types Josquin sets, only the psalms characteristically terminate on pitches other than the final.

'Dorian ad Phrygian'

The overall tonal scheme of these motets is related to internal changes of tonal focus for which Meier (1956) used Glarean's 'Dorian ad Phrygian' terminology. For example, a clear cadential emphasis on D, F, and A in *Memor esto verbi tui* moves

---

[103]Regarding the special role of *A la mi re*, see especially the discussions of *Huc me sydereo* in Chapter 6 and *In principio erat Verbum* in Chapter 7.

[104]See Krantz (1989:227, 232) and Stern (1981:20) for discussions which view the end of the motet as problematic.

[105]Dahlhaus noted the formal and tonal parallels of these motets and *Levavi oculos* and concluded that:

> the relationship that seems to exist between the "reprise technique" and the "divergent cadences" is far from clear. The thought that Josquin had in mind a balance between the "closed" nature of the form and the "open" nature of the disposition of cadences would hardly be more than a vague conjecture. (1968/1990:263)

from A to E with the text 'in loco peregrinationis meae' (wherever I have lived as a stranger) and a *mi-fa-mi* motive. This might be seen as a text-expressive departure (the close of the following verse returns to D), but it sets up a central section of D / E alternation crossing the two *partes* of the motet for which there is no parallel in the non-psalm motets. It begins at the level of the half verse, then moves to the level of verse, returns to the level of half verse for the central text 'Depracatus sum faciem tuam in toto corde meo: miserere mei secundum eloquium tuum' (I entreat you with all my heart, be merciful to me according to your promise) which is further emphasized by the use of homophony and the return of the opening motive. The cadential emphasis returns to the D, F, A cadences of the outer sections of the motet (verses 49-53 and 60-64 with the opening of the doxology and return of verse 49; see the cadential profile of the motet in Appendix 2).

Figure 4.12: D / E alternation in *Memor esto*

53 Defectio genuit genuit me,	A
* pro peccatoribus derelinquentibus legem tuam.	D
54 Cantabilies mihi erant justificationes tuae,	A/A
* in loco peregrinationis meae.	E
55 Memor fui nocte monimis tui Domine:	E
* et custodivi legem tuam	D
56 Haec facta est mihi:	
* quia justificationes tuas exquisivi.	E/E
[*Secunda pars*]	
57 Portio mea Domine,	
* dixi custodire legem tuam.	D
58 Deprecatus sum faciem tuam in toto corde meo:	E
* miserere mei secundum eloquium tuum.	D
59 Cogitavi vias meas:	A
* et converti pedes meos in testimonia tua.	A/D

Motive, imitation, and texture

Memor esto verbi tui is a densely motivic composition, as a distributional table of its imitative motives in Example 4.65 indicates. The distinctive opening

motive, repeated immediately in close imitation and rising sequentially, is relatively infrequently used, but frames and punctuates the structure of the motet.[106] Notable are the characteristic recitation formula introduced in the second verse (verse 50), emphasis on the *re-fa* third, the closing formula, and imitation at a fifth above. While the melodic material focuses on the pitches D and F, the imitative pattern focuses on D and A, a consistent feature of the motives in column B. Verse 54 introduces a significant variant with more extended emphasis on D through the melodic elaboration D-C-D, which carries through the uses of the theme in the *secunda pars*. A new ending formula, suggested in the extended recitation of the half verse which concludes the *prima pars* becomes increasingly important from the mid-point of the *secunda pars*. In its final appearance, when the recitation has been moved from the D/A axis to an F/C axis (implicit of course in the *re-fa* theme of the head of column B in the distributional table), the ending formula is recognizable from the psalm tones, but it is a termination associated with psalm tone 8, a surprising but unmistakeable reference.[107] Likewise the recitation of the opening verse of the *secunda pars*, verse 57, recalls the *tonus perigrinus* in its juxtaposition of the reciting notes D / C (A / G in the superius). The other primary imitative thematic material is introduced in the third verse (verse 51) and given in column D. In its original context it appears as a *la-fa-la* motive, common in *Re(D)* motets, but it turns both to A and

---

[106]The distributional table includes only motives as they occur as the basis of points of imitation. The recurrence of these motives in non-imitative contexts is discussed further below.

[107]All of the securely attributed psalm motets at some point, usually in a single voice, introduce at least one entire phrase of recitation. Similarly, there are other references to psalmody, which, like this one, are of a generic sort. Only *In exitu Israel* makes an unambiguous reference to a specific tone.

further to E where it suggests interpretation as the *mi-fa-mi* motive associated with the *Mi(E)* tonality.[108]

The opening motive returns with its text at the end of the motet, but also with the words 'in humilitate mea', 'vias meas', and 'pedes meos'. The motive is also used to underscore other text which is either set homophonically or adjacent to the homophonic passages of the motet: 'miserere mei secundum eloquium tuum', 'ut custodiam mandata tua', 'omnium timentium te, and 'et custiodientum mandata tua'.[109]

Obst (1957:160) observed that 163 of 327 bars of *Memor esto verbi tui* are for two voices alone, 74 are for three voices, and only 90 use the full vocal texture. Like the cadential structure, the imitative structure is carefully arranged to emphasize the central text of the motet and bridge the two *partes*. The tenor/bassus and superius/altus pairs are interrupted in bar 148 and new pairs—tenor/superius and bassus/altus state the extended recitational close of the *prima pars* (See Example 4.66). It is through this new imitative pattern that the conclusion to E is reinforced, using imitation at the fifth to move D/A // A/E. This voice pairing continues through the opening of the *secunda pars*, moving to close imitation in all voices and returning to the original vocal disposition following the first homophonic section and corresponding to the return of the opening melodic motive (b. 187).

---

[108]A similar table of imitative themes of *Qui habitat* would show how strongly parallel these motets are. Like *Memor esto*, motives from column B are the most prominent verse openings and tend toward repeated notes at the beginning.

[109]These motives suggest a personal resonance that accords well with the well-known anecdotal evidence through which Glarean linked the motet (and Josquin) to Louis XII (1547/1965:II,271-2); if reliable, Glarean's anecdote suggests a date of composition between 1498 and 1515. For the most recent discussion of Josquin's association with the French court, see Macey (1991a).

Not surprisingly given the construction of the opening verse of the motet, literal repetition and sequence are important constructive devices.[110] The annotations on Example 4.67 indicate the importance of these devices which culminate in the repeated circular thirds of verse 62.

The strong cadential and imitative roles played by the A and E in *Memor estor verbi tui* are mirrored in the significance of D and A for *Qui habitat.* The conclusion which accompanies the text 'et refugium meum' (bs 32ff), lacks the usual cadential patterning, and recurs several times in *Qui habitat* (see Example 4.68).

Also like *Memor esto,* the imitative pattern moves through a circle of fifths: G / D / A. This imitative pattern is particularly suited to voice pairs set a fifth apart, that is: G / D // D / A. The prevalence of this type of motion prepares the 'open' ending of the *prima pars* and its connection to the beginning of the *secunda pars.* The words 'refugium tuum' which end the *prima pars* are set to the same cadential material as the earlier 'et refugium meum'. Notably, all other verses of the psalm conclude with clear, and often reiterated cadences to G. Such points of imitation and cadences are illustrated in the opening and close of adjacent verses in Example 4.69.

Godt (1977: 283-8) used *Qui habitat* as one of his examples of 'motivic integration' in Josquin's motets, suggesting 'distantly related forms as derivatives' of the opening theme (:285). Example 4.70 reproduces Godt's Example 11 illustrating these derivations. Although he warns of 'the danger of interpreting family resemblances as ruling thematic processes' (281) the 'theme' of *Qui habitat* is a classic *re-fa* modal type (although this is not immediately apparent from the registral disposition of Godt's diagram) and his diagram could apply to almost any *re-fa* motet, especially a psalm-motet, with its clear verse delineation.

---

[110]The opening verse has been discussed by Obst (1957) and others in detail.

Verse grouping, formal structure, and modal types

Although each of these motets marks verse endings through cadences and often textural changes, as the discussion above suggested, verses are normally grouped together in larger units which correspond to the modal type. I will illustrate such verse groupings with examples from *In exitu Israel.* Josquin avoided verse-by verse repetition of the psalm tone and established larger verse groupings by motivic usage, use of the tone, registral emphasis of the superius, and cadential formulae. The principles at play may be illustrated by groupings of the *prima pars.*

Figure 4.13: Verse groupings in *In exitu Israel*

vv. 1-3	formal parallels between verses, stronger cadence at verse 3 (addition of basizans, extended superius, longer note values)
vv. 4-6	introduction of new motive on 'montes', textural and motivic parallels, text repetition, reiterated cadence at end of verse 6
vv. 7-10	lower tesitura, parallel texture between verses

Verses 1 through 3 were discussed above in reference to the distribution of the *tonus peregrinus* and are shown in parallel in Example 4.71. Verse 4 initiates a variant of the opening motive connected to the word 'montes' and breaks from the *tonus peregrinus* model by continued recitation on D in the altus. Verse 6, which opens with the same text, forms a parallel, following the contrasting tessitura and texture of verse 5 (see Example 4.72).

Contrasting breaks from the tone reinforce the predominant *re-la* modal type along with intermediate closes to B-flat and a *re-fa* type. Repetition is used for

closure, as is illustrated by the conclusion of the *prima pars* and its cadential extension in Example 4.73.

The *secunda pars* opens with an extensive section lacking reference to the tone. The beginning of verses are clearly marked by a rising *ut-fa*, and the section as a whole is a large scale *re-fa* modal type which continues through the following verses. The second verse of the *secunda pars* (verse 12) introduces immediate literal repetition of rising thirds which seem to be a hallmark of Josquin's setting of longer texts based on a recitation tone, and which uniformly occur in central sections of a work.[111] Novack noted the 'static' repetition of verse 16, which sets up the melodic-motivic figure that characterizes the next three verses: an A-B-flat-A (*la-fa-la*) derived from the tone. Verse 18 signals a return to the tone at the pitch level of D in the altus, which prepares the shift of the final verse of the *secunda pars*: it is the first verse in this *pars* to introduce recitation on the second half of the tone, on C, which allows the extended cadence to A characteristic of the interior *partes* of the psalm motets in this tonality.

The *tertia pars* signals a return to the formal principles and the *re-la* type of the *prima pars*. Stated in canon, the tone sounds for the entire opening verse, with a varied repetition and extension at the end of the verse. Clearly marked verse endings in the *tertia pars* present a microcosm of the techniques found in the earlier *partes* of the motet. Verse 21 relies on the rising *ut-fa* fourth, moving to the A-B-flat-A figure while repetition of a three-note rising *re-fa* third, now in the tenor, builds verse 22. The final verse group of the text moves back to the *re-la* emphasis and from the use of the tone to the *re-fa-re-la* motive in four-part imitation.

---

[111]See, for example the discussion of *In principio erat Verbum* in Chapter 7.

Domine ne in furore (*Werken* 59) shares the modal type of *In exitu Israel* although it does not incorporate a psalm tone. From the relationship of the two motets, I believe that *Domine ne in furore* is loosely modelled on the tonal profile of *In exitu Israel*, which was initially a response to the psalm tone. The most notable parallels in the two motets are the emphasis on *la-fa-la* motives and the frequent use of homphonic passages which are simple elaborations of the modal type. Example 4.75 gives the penultimate verse of each motet, illustrating this procedure. Both motets used a falling third, in the rhythm most frequently associated with that melodic shape, for the word 'Domine / Dominus'. The use of such third motives (cited in Example 4.76) are more prominent in *Domine ne in furore*, probably as a result of the lack of the *tonus peregrinus* which circumscribed the use of such motives in *In exitu Israel*.[112]

Even more so than *In exitu Israel*, *Qui habitat* marks verse ends with cadences to the final; the exceptions, the ending of each *pars* of the motet, conform to the conventions of the psalm motets in this tonality: the *prima pars* concludes with a cadence to A, and the *secunda pars*, which repeats the opening half-verse of the psalm, concludes on D.[113] Like *In exitu Israel*, formal and textural parallels establish verse groupings, as the first two verses of *Qui habitat* illustrate (see Example 4.77). The opening melodic figure spans a seventh, the characteristic *re-la* + *re-fa*, before

---

[112]Rifkin's (1991) cautionary remarks about the Josquin canon might be applied to *Domine ne in furore*. The earliest source of the motet is *BolC Q20* and Noble has suggested the unreliability of this manuscript's attributions. Macey (1992) has shown that the *Nunc dimitiis*, for which *BolC Q20* is the only source, is modelled on *Memor esto*. Most of the other sources of *Domine ne in furore* are late German ones which either transmit the motet anonymously or also transmit numerous works of questionable authenticity: *DresSL 1/D/6*, *HeilbS XCIII/3*, *1538/6*, and *1553/4*. Arguing in favour of the attribution of the motet to Josquin is its inclusion in *LonBL 19583*.

[113]Dahlhaus suggested that these endings were substitutions of the 'Aeolian' mode for the 'Dorian' which 'certainly cloud the Dorian character of the compositions but do not make it unrecognizable' (1991:261-2). No reason for the 'subsitution' is suggested. Dahlhaus also noted that *CambraiBM 125-8* adds a final G chord to the end of the motet.

moving to a *re-fa* cadence at the end of the verse. The opening verse also contains a strong suggestion and emphasis on the *re-la* figure shared with the *Re(D)* tonality, and its associated *la-fa-la* figure. This figure introduces an imitative pattern that recurs frequently in the motet on the pitches A and D and is used to create a near-static extension of the D-A fifth.

Many points of imitation in *Qui habitat* open with the rhythmic figure of the first verse, or a straightforward variant. Formal parallels are shared by the opening verses (as Example 4.77 illustrated), the central verses of the *prima pars* (verses 6-7; see Example 4.78), and the opening verses of the *secunda pars* (verses 10-12). Immediate repetition characterizes both *partes* of the motet. Immediate repetition of static and circular figures (in verses 6 and 8) is strategically placed: the first section (b. 83ff) falls at the midpoint of the *prima pars*; the second (bs 134ff) comes at the midpoint of the entire motet. Verse 6 is also singled out for the extension of the imitative pattern of the motet to its furthest extreme. The characteristic G / D / A imitation is extended to an implied E, although the first note of the subject is modified (bs 79-83). A melodic figure introduced in this point of imitation becomes increasingly prominent in the *secunda pars* of the motet (as shown in Example 4.79), until finally used in repetition and sequence in the penultimate verse.

The final verse of the psalm creates a large scale parallel with the opening, like those seen in adjacent verses. It returns to the closed four-part imitative pattern of the first verse: G / G / G / G,[114] along with the same melodic outline and register which is linked directly to the repetition of the opening half verse.

* * *

[114]Compare this imitative scheme with that of *Virgo salutiferi*, discussed above.

The psalm motets form a special sub-group within the *Re* tonality. They are marked by their emphasis on *A la mi re* and local changes of tonal focus between *Re* and *Mi* orientations, an emphasis which will be explored further in Chapter 6. These motets suggest the resonances of psalmody, although only one, *In exitu Israel*, incorporates a psalm tone.[115] Equally, the texts and their association with reciting tones is suggestive of the declamatory motives associated with imitative themes, the extensive use in these motets of repetition and sequence, and formal parallels of adjacent verses and verse groups.

Hymns and Tract

It remains to discuss one final group of works which have closer functional ties than the motets discussed thus far. The three hymn settings attributed to Josquin stand to one side of his motet *oeuvre*, both in style and transmission. All are based on Mode 1 chants: two set the hymn melody *Ave Maris stella*, and a third sets a verse of the hymn *Nardi Maria pistici*. The two settings of individual verses—*Monstra te* (*Ave Maris stella*) and *Honor, decus, imperium* (*Nardi Maria pistici*) are found only in *VatS 15*, a source containing several hymn compilations, in a layer of the manuscript thought to date from Josquin's tenure in the papal chapel.[116] The full setting of *Ave Maris stella* is likewise extant in only a single source, the later motet anthology *BolC Q20*.

---

[115]Built into the *tonus peregrinus* of that motet is exactly the kind of tonal oscillation which defines these motets.

[116]Regarding this MS, see Sherr (1975:211-12); on the authority of this MS, see Cummings (1990:8).

The Hymns in *VatS 15*: *Monstra te* and *Honor, decus, imperium*

Both settings in *VatS 15* are brief, straightforward hymn settings, which probably properly should not be classified as motets. The superius of *Honor, decus, imperium* is a simple elaboration of the hymn chant, and the cadence plan follows that of the Mode 1 chant moved to a G final with B-flat signature: G, D, G, G. The first two cadences are weakened by interruption of the *basizans* motion, and the third cadence employs the octave leap motion in the bassus (see the cadential profile in Appendix 2.)

Monstra te esse matrem has a more complex framework. It is part of an alternatim compilation (verse two is set for three voices by Dufay; verse four for four voices is attributed to Josquin; and verses six and seven, also for four voices, lack attribution).[117] It seems clear that Josquin used a D final in conformance with the Dufay setting to which he joined his verse. Had the verse not been set in this context, use of G final and B-flat signature would most probably have been the composer's choice.[118] The canon of tenor and superius state the chant melody in long note values with limited elaboration, and a two-bar division of each phrase of the hymn text allows the last note of the *comes* to overlap with the first note of the following *dux* phrase. The canon and counterpoint of the free voices is arranged to give the second cadence (that of the superius) at the end of each chant phrase precedence, and to emphasize the next entry of the superius through placement of the 'cantizans' suspension in the altus and the addition of the basizans. This is easily seen at the conclusion of the third phrase. The cadence of tenor and altus at bar 65 is negated by

---

[117]Both Sherr (1975:207) and Finscher (1976:645) argue persuasively that the manuscript evidence argues against Josquin's authorship of these last two verses. They are not considered in the discussion which follows.

[118]See the discussion above regarding the *Re(G)* and *Re(D)* tonality.

the fourth dissonance of the superius leading to the cadence on C in bar 68. The cadence to A which follows in bar 71 coincides with the superius entry of the final phrase of chant. Osthoff (1965:II:375) reproduced the chant melody as given on fol. 42 of *VatS 15*. Dufay's simple superius paraphrase of the chant melody clearly matches this tune. Josquin's setting reflects one important variant: the first phrase adds an additional note and ends on A, not G. Whether this was simply the chant as Josquin knew it—which is likely—[119] or was necessitated by contrapuntal design can not be definitively stated here, but the resulting emphasis on the confinal should not be overlooked. Since the overlap of phrase endings and beginnings of *dux* and *comes* is integral to the canonic conception, the first phrase must conclude on A, not G (which would have produced a jarring dissonance with the A which opens the next phrase), and the cadences otherwise follow the chant: to D for the midpoint, C for the third phrase, and concluding on D. The final two (anonymous) polyphonic verses conclude their first phrases on A, suggesting that this was the chant as sung in the papal chapel in the late fifteenth century.[120] Dufay's setting of some fifty to sixty years before used the other common chant, one which was less amenable to the polyphonic tonal considerations of the Josquin generation.[121]

---

[119]The first phrase of the full *Ave Maris stella* setting in *BolC Q20* ends on the confinal.

[120]For variants of the chant from the twelfth through sixteenth centuries, see Haydon (1967:80).

[121]On Dufay's hymn cycles and their dates, see Fallows (1987.135-50).

Hymn text set in motet style

Unlike *Monstra te* and *Honor decus imperium*, *Ave maris stella* sets a hymn text in 'motet-style' and is transmitted in a manuscript consisting entirely of motets.[122] Elders described the *cantus firmus* treatment of *Ave Maris stella*:

> Notwithstanding the hymn's metric form and the use of all seven strophes of the hymn, the motet is through-composed. To avoid monotony, Josquin varies and paraphrases the hymn melody so thoroughly that its strophic structure is all but obliterated, but he marks the beginning of each strophe by quoting the initial interval of a fifth, ut-sol, in all voices. Fragments of the hymn are found in all four voices, but they are not used in a manner that can be called migrant technique. (1975:536)

However, close examination of the relationship of the motet to the chant reveals remarkable consistency in treatment. The superius and tenor are the structural voices in relation to the chant, while cadential patterns are established by adjacent voices. The opening and final phrases of the chant are always articulated by the tenor/ superius pair, and joined on occasion by other voices in imitation. The two interior phrases of chant are always stated by the tenor (see Example 4.80). Rhythmic motives are tied to the recurring pitch patterns of the chant (see Example 4.81). The verses which open each *pars* of the motet are tied together by duration and texture (i.e., verses 1-2 = 35 bars each of paired imitation; verses 5-6 = 23 bars each alternating paired voices and free counterpoint). The cadential profile of all of the verses replicates the cadential profile of the governing chant: D, G, F, G; the consistent presence of the opening and concluding phrases of chant in the superius

---

[122]Noble (1984:77) questions the authenticity of *Ave Maris stella* on stylistic grounds. The hymn setting is transmitted only in a single source, *BolC Q20*. This MS, which probably dates c. 1530, is also the single source for the questionably attributed *Nunc dimittis*.

coupled with this cadential framework defines the tonal profile of the motet as a repeating verse structure which is simply a polyphonic elaboration of the hymn.

Tract

Like the hymn settings, *Domine non secundum peccata nostra* (*Werken* 13) stands slightly apart from the majority of motets discussed in this study. Sherr provided the clearest context for the Roman tradition of which this motet is part. The settings of this mode 2 tract from that tradition reveal a reliance on paraphrased chant, long duets, special care for parts of the texts connected with papal ceremony, and lack of 'clearly articulated phrases, sharply profiled rhythm and clear textual projection' (1988:450). Contrary to the emerging view of the motet in general as para-liturgical adornment, the Roman settings of *Domine non secundum peccata nostra* appear to reflect liturgical function although, as Noble (1985:16) observes, Josquin's elaboration stretches the limits of liturgical propriety.

The cadential profile of the motet is that of a straightforward *re-fa* modal type. Cadences to G are most prominent, and secondary cadences to B^{b} and F, consistent with the modal type, reflect the profile of the paraphrased chant. That Josquin does not slavishly follow the chant is illustrated by the opening duo where a cadence to G anitcipates the first chant cadence to F, and likewise the close of the second phrase to B^{b}. The chant emphasis on the *repercussio* is retained in the superius even when the paraphrase is in another part. The only change in emphasis is seen in the opening of the *quarta pars*, with cadences to D and extended use of *la-fa-la* figures associated with *re-la* types, but this, too, is clearly derived from the chant used in imitation in all four voices. The opening section of the *quarta pars* concludes with a strong cadence to F, which is, like the others, chant-motivated. The final two sections of the *quarta pars* illustrate an extended *re-fa* modal type.

CHAPTER 5

UT TONALITY

This chapter examines the *Ut* tonality in Josquin's motets from perspectives similar to those employed in Chapter 4 on the *Re* tonality. The areas examined include an overview of the motet- and text-types associated with this tonality; the relationship of the *Ut* tonality and the modes; generic modal types and cadential hierarchies of this tonality, followed by specific examples of each arranged by final; and the relationship of the *Ut* tonality and pre-existing chant and scaffolding devices. The chapter concludes with a separate discussion of motets with questionable attributions.

Twenty-one motets attributed to Josquin may be classed in the *Ut* tonality. Motets from this tonality are among the most frequently-analyzed of Josquin's *oeuvre*. Recent study of them has focused on two related issues: the first begins from Glarean's assertion that the Ionian was the most used of all modes;[1] the second searches for 'early' examples of predecessors to the major.[2]

Table 5.1 groups the motets of this tonality by final, listing separately motets which appear only anonymously in early sources and those with an exclusively later

---

[1]E.g., Dahlhaus (1968/1990:269) and Beebe (1991).

[2]E.g., Lowinsky (1962) and Novack (1970).

German tradition.[3] All of the motets in this tonality with secure attributions incorporate a pre-existing melody or scaffolding device.[4] Nearly half (six) of those are based at least in part on a sequence text.[5] The remaining motets set antiphons (five), a reponsory (one), burial prayer (one), and a newly composed poetic text accompanied by a solmization tenor (one). By contrast, the motets with attributions and transmission primarily in German sources are on Old Testament texts: three are psalms (two with doxology), two are from the books of Kings, and one is the canticle of the three young men. Fifteen motets (including all the antiphons and Old Testament texts) are set for four voices. The prosa *Ave verum* is set for an alternating texture of two and three high voices; its reduced texture may reflect specific para-liturgical use analogous to the reduced voice texture common for certain sections of the Mass. The settings for five and six voices (five in all), like those of the *Re* tonality, include large-scale and widely-transmitted sequences based on canonic or quasi-canonic distribution of a cantus firmus. *Homo quidam fecit coenam*, the only responsory attributed to Josquin, is also for five voices and based on a canonic cantus firmus in the style of the sequences.

---

[3]Even this distribution lends a new view to Glarean's assertion that the 'Ionian' is the most used of modes, with a notable concentration here of works from German source traditions and several works whose attribution to Josquin derives from sources linked to Glarean, e.g. *Planxit autem David*. Even the brief source overviews given in the Tables 4.1, 5.1, 6.1 suggest that the national preferences Owens (1992) posited certainly extend to text types and may also include a preference for particular tonal configurations. Glarean's statement about the prevalence of 'Ionian' may well represent a Swiss-German tonal preference that reflects associations with certain text types.

[4]*Ut Phoebi radiis* uses a solmization tenor, *Stabat mater* quotes a Binchois chanson in the tenor, and all of the other motets incorporate chant.

[5]*Ave Maria ... virgo serena* uses the sequence text and chant only for the opening. On the text of the motet, see Drake (1972). Four of these motets with rhymed poetic texts might be connected with *laude*: *Ave verum corpus*, *Ave maria ... virgo serena*, *Mittit ad virginem*, and *Stabat mater*.

Table 5.1: *Ut* Motets

Ut (F) Motets	Text	c.f. mode	Earliest Sources	Comments
Ut Phoebi radiis	solmization	hexachord	*RISM 1505/2*	flat signature only in tenor; van Benthem (1987) suggests that 1505/2 is a realization from three original parts
Alma Redemptoris mater	Marian antiphon	5	*BolC Q18* (anon.) [1502-6]; *FlorBN II.I.232* [1516-21]; *RISM 1519/2*	
Regina Caeli	Marian antiphon	6	*BolC Q20*	
Descendi in hortum meum	Song of Songs 6:10, 12, alleluia (vespers ant.)	7	*LonBLR 8.G.vii* (anon.) [1513-25]; *VienNB Mus.15941* [1521-31]; *VatP 1976-9* (anon.) [1528-31]	Noble (1984) questions on stylistic grounds
Stabat mater	sequence	[Binchois chanson]	*VatC 234* [1498-1503 *BrusBR 9126* [1505]	29 sources
Ave verum corpus	sequence	6	*RISM 1503/1*	other sources are Swiss-German and related: *MunU 322-5*; *BasU F.X.22-4*; *SGallS 463*; Glarean; Wilphlingseder
Inviolata, integra et casta es, Maria	sequence	6	*FlorL 666* [1518]; *RISM 1519/3*	18 sources
Absolve, Quaesumus, Domine	burial prayer, requiem in tenor	6	*ToleBC 21* [1549]	Just (1965) questioned authorship; Antonowycz (1966) defended authorship
Earliest sources anonymous, attributions in later German sources:				
Planxit autem David	2 Kings 1:17-27	lamentation tone	*RISM 1504/1* (anon.) *FlorBN II.I.232* (anon., Ninot in index) [1516-21]	attribution to Josquin in German sources—DresSL 1/D/505; SGallS 463; Glarean—and VatS 38 [1563]
Laudate, pueri, Dominum	psalm with doxology	tone 5	*VerBC 760* (anon.) [1520-30]; *RISM 1539/9* (anon.)	att. Josquin in *KasL 24* and *RISM 1553/5*
Late German Sources only:				
Dominus regnavit	psalm with doxology	tone 8? (Meier)	*RISM 1539/9*	*RISM 1553/5*; *LeipU 51* [1555]
Benedicite omnia opera	canticle	?	*RISM 1537/1*	Dahlhaus (1968/1990) questioned authorship

Ut (C) Motets	Text	C.f. mode	Earliest source	Comments
Ave maria ... virgo serena	sequence + devotional poem	(6)	*MunBS 3154* [1466-1511]; *RISM 1502/1*	21 MS sources, 1 print and Glarean; Noblitt (1974) suggests that it was copied into *MunBS 3154* by 1476; Noble (1984) suggests mid-1480s
Mittit ad Virginem	sequence	6	*RISM 1504/1*; *VatS 46* [1508-27]	
Alma redemptoris / Ave regina	Marian antiphons	5 & 6	*MilD 3* [c. 1500]; *VatS 15* [1495-1500]	
Homo quidam fecit coenam	responsory	6	*VatS 42* [1503-7]; *RISM 1508/1*	
Late German sources only:				
In Domino confido	psalm		*KasL 24* (anon.) [1534-50]; *RISM 1538/6*	Noble (1984) questioned authorship on stylistic grounds

Ut (G) Motets	Text	C.f. mode	Earliest source	Comments
Benedicta es	sequence	8	*VatS 16* [1512-7]	Widely disseminated; German tradition of *secunda pars* only
Earliest sources anonymous, attributions in later German sources:				
Paratum cor meum, Deus	psalm		*CorBC 95-6 / ParisBNN 1817* (anon.) [1515-6]; *FlorBN Magl.164-7* (anon.) [1515-22] *RISM 1539/7*	no attributions for any works in either *CorBC* or *FlorBN*
Late German Sources only:				
Stetit autem Salomon	1 Kings 8·22-4		*RISM 1538/7*	

Ut (B^b) Motet	Text	C.f. mode	Earliest Sources	Comments
O admirabile	antiphon	6	*CambrinP 1760* [1498-1516]; *FlorBN II.I.232* [1516-21]	only first motet of cycle uses *Ut* tonality. See discussion in Chapter 4

The *Ut* tonality and the modes[6]

My proposal of an *Ut* tonality, encompassing finals on F, C, G (and less commonly B-flat), suggests a mediation between the usual analytical frameworks of an eight-mode conception and an evolutionary view which moves toward a two-mode major-minor system. It is this tonality which most clearly distinguishes the theory I have suggested from a Dahlhaus-like *Gesamtmodus* which allows four primary modes based on the *maneria* but minimizes the distinction between authentic and plagal. That is, the *Re* tonality effectively encompasses motets which might be classified on the basis of tonal type and so forth as Modes 1 and 2—the *Protus* modes. The *Mi* tonality likewise incorporates Modes 3 and 4, although this relationship encounters considerably greater difficulties.[7] The *Ut* tonality crosses the boundaries of two *maneriae.* I suggested in Chapter 2 that the distribution of

---

[6]Dahlhaus (1968/1990:269-80) briefly considered many of the motets discussed in this chapter or the relevant section of Chapter 8: *Ave verum, Ut Phoebi radiis, Homo quidam fecit coenam magnam, Alma redemptoris mater, Alma redemptoris mater / Ave regina caelorum, Mittit ad virginem, Ave Maria ... virgo serena, Inviolata, integra et casta es, Maria, Planxit autem David, Laudate pueri Dominum,* and *Benedicite Domini Domino.* Writing in response to Riemann's and Lowinsky's thesis that C-ionian compositions represented the prototype of major tonality, Dahlhaus followed Glarean's nomenclature and examined whether motets with an F final and B-flat signature might be classed as transposed Ionian, and what modal basis lay behind motets with a C final and no signature. He concluded that

> An Ionian mode that leaves open the possibility of being understood as modified Lydian distinguishes itself from the harmonically tonal major mode by the scant significance of degree IV: in the f-mode, a B-flat that can be interchanged with B-natural is no subdominant. And according to Zarlino, it is degree III, not IV, that forms the third clausula of the f-mode (along with the cadences on F and C). Zarlino's modal theory may suffer from some errors induced by a compulsion for systematization. But the assertion that I-V-III represents the hierarchy of degrees in the f-mode—that degree I functions as the "*clausula primaria,*" degree V as the "*secundaria,*" and degree III as the "*tertiaria*"—is unquestionably sound (:272).

Dahlhaus demonstrated both the inappropriateness of linking these motets to 'major' tonality, and the difficulty of accommodating them in either an eight or a twelve mode description.

[7]See Chapter 6.

Josquin's motets in modal categories highlights a notable lack of Mode 7 and Mode 8 motets. The source dissemination catalogued in Table 5.1 further reduces the number of securely attributed motets which might be described as Mode 7 or 8 to the single Mode 8 sequence *Benedicta es*. Theoretically, the distinction between Modes 5/6 and 7/8 lies in two related areas: the species of fifth and fourth employed by these modal pairs and the repercussions of the plagal modes. In the practice of Josquin's motets, both these distinctions are blurred beyond recognition. The species of fifth reflects the position of each of the finals—F, C, and G—in the soft, natural, and hard hexachords respectively. The only example of an *Ut(F)* motet in which B-flat is not a signature flat is *Ave verum corpus*, but the regular occurrence of *B-fa* as *musica recta* in the motet is unambiguous, and as all the theorists suggest, B-flat is commonplace in Modes 5 and 6.[8] Similarly, the putative difference of the species of fourth is 'non-essential'. *Ut(F)* motets often introduce E-flat as *musica recta*; likewise *Ut(C)* motets may contain signed B-flats. Conversely, *Ut(G)* motets imply inflection of F to F-sharp as the cadential sub-semitone. Thus the presumably modally definitive fourth and seventh scale degrees lack tonality-defining significance, since the overlap of hexachords characteristic of these finals and the normal cadential *musica ficta* negates any such distinctions. Notably both scale degrees are adjacent to the two primary areas of cadential focus: the final and confinal, suggesting that Glarean's Ionian does indeed represent the prototypical scale type of this tonality:

F G A B^b/[B] C D [E^b]/E F

C D E F [F#] G A [B^b]/B C

G A B C/[C#] D E F/[F#] G

[8]Glarean adds a signature flat in his edition of the motet.

While the authentic modes that would fall in this category share the same repercussion, namely *ut-sol*, the plagal modes do not. The Mode 6 repercussion is *fa-la* (=*ut-mi*), while the Mode 8 repercussion is *fa-fa* (=*ut-fa*). As described in Chapter 3, melodic emphasis on *ut-fa* is equally prominent among the finals of the *Ut* tonality, but as the examples cited in this chapter illustrate, is almost always subsumed by an *ut-sol* modal type. Unlike the *ut-mi* and *ut-sol* modal types, the upper boundary of the *ut-fa* modal type (*fa*) is dissonant with its final. Tonal focus through cadential emphasis on *fa* is infrequent and suggests no modal connections. Indeed, *Benedicta es*, based on a Mode 8 chant, contains only a single cadence to its repercussion, C. Finals on G do suggest restrictions which do not affect finals on F and C: cadences to B, although possible are unlikely and extremely infrequent in any context in Josquin's motets, whereas cadences to the equivalent degrees for *Ut(F)* and *Ut(C)* motets (A and E respectively) are not only possible but prominent. The cadential profile of *Benedicta es* reflects this pattern: with the exception of the single cadence to C in b. 73, all the cadences in the motet are to G or D (see the cadential profile in Appendix 2). This limitation suggests one reason for Josquin's apparent preference for F and C as finals (a Mode 7 chant is even moved to a final on F in the case of *Descendi in ortum meum*). Indeed, as Krantz (1989) noted, *Benedicta es* is closely allied in its formal and textural procedures with another sequence: *Praeter rerum seriem*, a *Re(G)* motet. This relationship is discussed in more detail below in the context of G finals. The G final is also problematic because of the implicit hexachord relationship which supports the *Ut* tonality, just as the B-flat final is rarely encountered. Both suggest a configuration which would theoretically push to the extremes of hexachord combinations:

Figure 5.1

Final:	Hexachord configuration
B^b:	Double soft + soft hexachord
F:	Soft hexachord + natural hexachord
C:	Natural hexachord + hard hexachord
G:	Hard hexachord + double hard hexachord[9]

For this reason, too, an *ut-mi* modal type is less likely for a G final, not only because of the emphasis on B it would imply, but because of the melodic formulas associated with it which rely on its solmization as *fa-la* (i.e., *ut* = *fa*; *mi* = *la*). For G to become *fa* an unlikely mutation to a signed F-sharp from the hard hexachord on D is required.

The double antiphon motet *Alma redemptoris mater / Ave regina caelorum* suggests the especially useful role of a final on C in moving between the soft and hard hexachord by means of the natural hexachord. *Ut Phoebi radiis* explores explicitly the possibilities of the *Ut* tonality with its use of the *ut* hexachord as a solmization scaffolding device.

Alma redemptoris mater is the only Mode 5 chant employed in these motets, and interestingly occurs twice, once with a Final on F, and once with a Final on C (in a setting which simultaneously quotes the Mode 6 antiphon *Ave regina caelorum*). The distribution of Mode 6 chants is equally divided between finals on F and C, with three each. (F = *Ave verum corpus*; *Inviolata integra et casta es, Maria*; and *Absolve, Quaesumus, Domine*. C = *Ave Maria ... virgo serena*; *Mittit ad virginem*; and *Homo quidam fecit coenam*.) The motets of the *Ut* tonality do not display conventions of

---

[9]Mode 8, with its final on G and repercussion on C, of course relies on the conjunction of the hard and natural hexachord; that conjunction allowed Aron to class a Mode 6 sequence with final on C (*Mittit ad virginem*) as Mode 8.

clef combination and register as overtly as the motets of the *Re* tonality, although pairs of motets do share the same registral disposition: e.g., *Ut Phoebi radiis* and *Regina caeli*; *Stabat mater dolorosa* and *Descendi in ortum meum*; *Inviolata integra et casta es Maria* and *Absolve, Quaesumus, Domine*; *Laudate pueri Dominum* and *Benedicite omnia opera*; *Homo quidam fecit coenam* and *Mittit ad virginem* (see Example 5.1). These registral parallels reflect both texture and a canonic scaffolding device in the case of *Inviolata* and *Absolve* and also suggest chronological proximity within the registrally-related pairs. The most consistent sub-group consists of the three motets with G finals, irrespective of questions of authorship; the ranges are the same as the *Re(G)* motets, suggesting generic conventions associated with the choice of final.

Modal types and cadential hierarchies associated with the *Ut* tonality

Three modal types are associated with the *Ut* tonality: *ut-mi*, *ut-fa*, and *ut-sol*. *Ut-sol* is the most common and hence links finals which might otherwise suggest distinct modal connotations; *ut-mi* and *ut-fa* types tend to occur locally and often connect to *ut-sol* types. This is particularly true of finals on F and G, where the upper register of the superius (whether or not it would be described modally as plagal or authentic) easily accommodates the *ut-sol* fifth. That option is taken up for C finals only in motets with higher upper ranges, as in the case of *Homo quidam* and *Mittit ad virginem*. The lower range of *Ave Maria ... virgo serena* and *Alma redemptoris / Ave regina* immediately points to emphasis on an *ut-mi* modal type. Like the choice between finals on F, C, and G, no obvious modal distinction is reflected by these modal types. The placement of the final relative to the available vocal registers circumscribes the possibilities of modal types available, and confirms, as was generally suggested with the *Re* tonality, that the choice of final influences the

character of a work within the basic tonality in a manner which cannot simply be called transposition.

In addition to cadential emphasis on those pitches normally described as modally defining—that is, the final, confinal, and repercussion—the *Ut* tonality frequently emphasizes cadentially the sixth scale degree in one of two ways.[10] Either the *basizans* motion is interrupted in cadences to the final and concludes a third below the final (as in the opening motet of the *O admirabile* cycle; see the discussion in Chapters 3 and 4), or cadential motion focuses on the sixth scale degree.[11] The solmization canon of *Ut Phoebi radiis* (*Werken* 22)[12] demonstrates the first case(see Example 5.2). Each bassus entry of the hexachord also functions as an 'interrupted' basizans in conjunction with the upper voice cadence to F. Such emphasis on D in an *Ut(F)* tonality is reinforced in *Ut Phoebi radiis* because the pitch is the boundary of the hexachord which serves as the canonic scaffolding device on which the motet is based. The conclusion of the *prima pars* is a simple extension of a cadence on D, elaborated with a repeated *fa-la-fa* motive common to *Re(D)* motets (see Example 5.3).

The use of motivic materials associated with *Re(D)* motets is not restricted to *Ut Phoebi radiis*, however. *Ut(F)* motets in which the superius range extends to f^2 also borrow the *re-fa* modal type common to the *Re(D)* tonality and a *re* cadence as a

---

[10]While the Dahlhaus citation in note 8 above cites Zarlino as the basis of a I-V-III hierarchy, no theorist discusses the significance accorded to the sixth scale degree in polyphony.

[11]In this regard, see especially the discussion of the gospel motets in Chapter 7.

[12]On the text of this motet, its association with the Order of the Golden Fleece, and probable dates of composition, see Prizer (1985) and van Benthem (1987). Although Osthoff (1965:II,79-80) believed that the motet was an 'early' work, Prizer's suggested date of 1501 accords well with the solmization scaffolding device.

means of punctuating a descent (usually an octave) from the highest note (see Example 5.4).

Ut(F)

Ut(F): ut-sol. Motets in the *Ut* tonality which rely on an *ut-sol* modal type generally establish that type melodically in the opening gesture of the motet (see Example 5.5). Most commonly, melodic motion in the upper species of fourth and cadential emphasis on *sol* reinforce the modal type. The use of the upper register in the superius frequently results in octave scale descents, but as in the case of *Re* motets with high clefs (e.g. *Salve regina*), such descents tend to be local events which create tonal focus on the boundary pitches of the modal type. Two examples of motets in which this occurs, *Stabat mater* (see Example 5.4, above) and *Ave verum corpus* (see Example 5.6), both incorporate pre-existing material in the tenor. In the excerpt cited from *Stabat mater*, interaction between the cantus prius factus and free voices is minimal; in *Ave verum corpus*, the superius anticipates the chant at a fifth above. In spite of the distinct treatment of pre-existing material, the motets share similar tonal profiles. Both excerpts also illustrate the cadential roles of D and A in *Ut(F)* motets. The excerpt from *Stabat mater* points to the use of sequence as a means of extending the modal type, and also the use of partial statements within the modal type which reinforce the tonal focus on the final. *Ave verum corpus* similarly extends the modal type which closes the *secunda pars* by means of melodic sequence (see Example 5.7).

The *ut-sol* motive occurs in a variety of contexts in *Stabat mater*: for example, in the excerpt reproduced in Example 5.8, it is the basis of a point of imitation, stated in long notes in the tenor melody, and used in the standard superius cadential format. Immediate recurrences of the modal type, like that suggested by the

reduction of this example, are common in the *Ut* tonality, and occur throughout this motet. Example 5.9 gives another instance of the modal type at a local level. The ending of the *prima pars* mirrors the *ut-sol* fifth of the tenor melody, supported with a cadence on C (see Example 5.10). Immediate repetition strengthens closure, and melodic motion is used to create tonal focus on C, similar to that which occurs earlier in the motet. Melodic and cadential emphasis on A (see Example 5.11, bs 67-9) always returns to tonal focus on C (see Example 5.11, bs 70-1).

Motets with an *Ut:ut-sol* modal type which do not use the upper register of the superius to emphasize *sol* instead tend to borrow the *ut-sol* pattern associated with a final on C, as in *Ut Phoebi radiis*. The conclusion of the motet moves from *sol* (=*re*) to *ut* in a simple stepwise pattern G-F over the entire section, with various statements of the *ut-sol* fifth (see Example 5.12). Given the extensive bassus pedal on C required by the solmization canon, it is not surprising that such borrowing from the *Ut(C)* tonality would be used as a means of extension.

An interaction of the *Ut(F)* and *Ut(C)* tonality is implicit in the tenor-bassus hexachord canon on which this motet is based. With the last *sol-ut*, the tenor is integrated melodically with the superius and altus. Elsewhere in the motet, the imitation of tenor and bassus is replicated in the pair of free voices. In each of the *partes* the full hexachord statements include altus in a syncopated pattern which creates a 5-6-5 sequence in the ascending hexachord of the *prima pars* and a descending 4-3/6-5 suspension chain in the *secunda pars* (see Example 5.13). At this point in the *prima pars* the motet introduces all three *ut* hexachords moving successively from hard through natural to soft.

The falling hexachord also initiates the most extensive cadential sequence of the motet (see Example 5.14), moving in a cycle from E, prompted by the four-note (*la-mi*) descent of the hexachord characteristic of the *Mi* tonality. The superius-altus

duo moves sequentially through a cycle of fifths to re-establish the superius c^2 in bar 117, which coincides with the next hexachord statement, and further reinforces the *Ut(F)* tonality through a cadence to F.

Ut(F): ut-mi (=fa-la). *Inviolata integra et casta es Maria* (*Werken* 42) well illustrates the prominent features of an *ut-mi* modal type. The opening point of imitation emphasizes a melodic figure common to most *ut* motets: *ut-re-mi-sol.* Unlike the *ut-sol* modal type however, the emphasis returns to A *la mi re.* Implicit in the *ut-mi* modal type (and its alternative solmization *fa-la*) is emphasis and extension of the modal type through motion below the final, as exemplified by the opening gesture of *Inviolata.* The repetition of the opening and anticipation of the cantus firmus canon emphasizes three-bar units (see Example 5.15).[13]

Cadential emphasis is also used to create tonal focus on A (see Example 5.16), suggesting that *ut-sol* figures are subsidiary. Borrowed figures from the *Mi* tonality are used locally for extension of the *mi* (=*la*) of the modal type, moving to a *re-la* cadence (see Example 5.17). Rather than suggesting 'modal commutation' these patterns extend the upper boundary of the modal type. The melodic motion of the superius frequently moves to C, as at the end of this example, and there is an increasing emphasis on C as the motet progresses. Taken alone, the *secunda pars* suggests greater emphasis on an *ut-sol* modal type,[14] as illustrated by the reduction of Example 5.18, but it always returns to the *mi* of the modal type, as the opening of the

---

[13]This is a common feature of five and six-voice motets, see the discussion of *Pater noster, Illibata dei virgo nutrix,* and *Praeter rerum seriem* in Chapter 4 and *Huc me sydereo* in chapter 6.

[14]Compare this reduction to that of *Absolve, quaesumus, Domine* below.

Tertia pars illustrates (see Example 5.19), frequently by breaking a sequential melodic pattern at that point, and always with underlying bassus support on the final.

Ut(C)

With only four securely attributed motets which use C as a final, generalizations about tonal practice can be made only with caution. The primary modal types of the *Ut(C)* motets are the same as those of the *Ut(F)* motets, that is: *ut* (=*fa*) - *mi* (=*la*) and *ut-sol*; however, the different registral placement relative to the final results in patterns of tonal focus that are specific to this final. As the cadential profiles in Appendix 2 indicate, cadences in the *Ut(C)* motets are restricted to the pitches C, G, and E in that order of frequency.[15] Cadential support of C by an A in the bassus is not uncommon, but none of these motets exhibits the relatively strong tonal focus on the third below the final apparent in motets of the *Ut(F)* tonality. This is in large part due to the registral disposition of voices. The upper species of fourth as a means of tonal focus on *sol* in the *ut-sol* modal type is not used with a final on C. Similarly, the *ut/fa - mi/la* modal type fits perfectly into this voice distribution and is characteristically stated as a composite *ut-mi* from the overlapped hard and natural hexachord with the melody *ut*(G)-*fa/ut* (C)-*la/mi*(E):[16]

Ut	re	mi	fa	sol	la
			Ut	re	mi
G	A	B	C	D	E

[15]Two cadences to D in *Mittit ad virginem* are discussed below.

[16]Compare the 'composite' *Re(D):re-fa* type discussed in Chapter 4, Example 4.6.

Ave Maria ... virgo serena (*Werken* 1)[17] and *Mittit ad virginem* (*Werken* 3) illustrate the *ut/fa - mi/la* and *ut-sol* modal types of the *Ut(C)* tonality respectively. *Ave Maria ... virgo serena* replicates the *ut/fa - mi/la* modal type at the level of text verse. I have discussed formal and motivic features of this motet elsewhere (Judd 1985).[18] It is relevant here to point to the cadential ordering which accompanies each verse of text. Brackets on the cadential profile in Appendix 2 indicate the parallel treatment of the first pair of lines of each text segment.[19] The clear-cut cadential structure is matched by the use of the *ut-mi* modal type at the level of verse, reiterated by formal cadences to C. My earlier graphs of this motet (:230-9) might be adduced as an argument for the similarity of the *Ut(C)* tonality and C major tonality. While there are undeniable similarities, if cast in the context of modal types, the technical correspondence of this example with others discussed in this chapter with less affinity with major tonality argues against returning yet again to the association of 'ut', 'Ionian', and 'major'.

Mittit ad virginem follows just as clearly the syntax of its sequence text. Each of the ten verses and the concluding doxology close on C. The chant is quoted

---

[17]This motet is among the most extensively studied of the *Ut* motets. Noblitt (1974) suggested a *terminus ante quem* of 1476; Noble (1984) argued for the more traditional date of the mid-1480s. Bloxam (1993) has recently suggested a connection between the motet and a *lauda* melody, which would place the motet in the Milanese orbit and argue for the earlier date.

[18]A series of neo-Schenkerian graphs of the motet accompanies that article. Krantz (1989:148-60) provides an extensive critique of those graphs. He quite rightly points to problems inherent in linking, as I did, the *repercussio* of Mode 6 with a Schenkerian primary tone (:154). My subsequent publications and Chapter 3 demonstrate my own move away from such a stance. The *a priori* modal framework that Krantz substitutes, however, is equally problematic. He argues for degrees of modal delineation which he describes as 'modal presentation', 'modal confirmation', and 'modal contrast' (:153). This leads him to argue that each voice should be graphed separately and in relation to modal factors (:157). He provides such a graph for a twenty bar excerpt of two voices. Ultimately, however, Krantz admits that the analysis he advocates is 'difficult and messy' (:160); the greatest shortfall of such an analysis is that it is confined to modal features of individual voices and can offer nothing about the tonal organization of polyphony.

[19]On the cadential structure of this motet, see Judd (1985:207-17).

primarily in the tenor and superius, occasionally migrating to the bassus and occurring imitatively in the altus. The chant itself frequently reiterates the *ut-sol* fifth. Four examples from the *secunda pars* demonstrate both the level at which the modal type is active and the typical elaboration associated with the *ut-sol* modal type and a final on C. In the duo which opens the *secunda pars*, the tenor chant relies on a basic *ut-sol* melody. As the reduction in Example 5.20 illustrates, the superius counterpoint extends *sol* for the first ten bars in two ways: first through a simple octave descent, and second through a *sol-ut* fifth borrowed from the hard hexachord (i.e. D-C-B-A-G) which concludes with a cadence on G (b. 10) before two clear *sol-ut* descents metrically displaced between the superius and tenor. The procedure of extending the boundary *sol* of the modal type by taking it as the *ut* of the next hexachord over (in this case the hard hexachord), in effect a local 'tonicization', is exactly the same as that discussed with reference to *In Phoebi radiis* above. When the chant melody appears in the superius, it always reinforces the *ut-sol* modal type (see Example 5.21). Repetition also increases emphasis on the modal type (see Example 5.22). Typically, each step of the final statement of the modal type is extended through simple sequential elaboration, as in the conclusion of the doxology which ends *Mittit ad virginem* (see Example 5.23). Throughout the motet, statements of the modal type operate at the level of this example, that is in groupings of roughly 15 - 30 bars.

As in *Ave Maria...virgo serena*, patterns of texture, mensuration, and register contribute to the overall organization of the motet. In *Mittit ad virginem*, the melodic structure is influenced throughout by the ever-present chant while *Ave Maria ... virgo serena* apparently operates independently of such restrictions; both motets nevertheless use modal types in a similar manner.

Chant conventions and the *Ut* tonality

Just as the use of the *Ave Maria* chant in more than one motet provided insight into the relationship of chant melodies and tonal conventions in the *Re* tonality, a comparison of the two *Ut* motets which incorporate the *Alma redemptoris mater* antiphon (*Werken* 21 and 38) gives a useful overview of such interaction in the *Ut* tonality.

Alma redemptoris mater (*Werken* 38) sets the antiphon for low voices and was described by Aron as Mode 5 with a final on *F fa ut.* The chant is lightly paraphrased and stated in canon at the unison in the altus and tenor. Motives from the chant form the basis of points of imitation with the superius and bassus at the beginning and end of the *prima pars.* The overlap of the ranges of the upper three voices and the use of imitation creates the effect of the extension of single sonorities on F and C for extended periods and is implicit in the opening point of imitation at the unison (see Example 5.24).

Voice pairs often immediately repeat a chant phrase and its counterpoint, as in bars 78-88 (Example 5.25a), further emphasizing the relatively static nature of the motet. Such repetition extends to immediate repetition by the superius and bassus near the end of the motet (Example 5.25b). The extension of the final cadence reinforces the *ut* of the *ut-fa* modal type. It is not surprising that this is the only motet to suggest such this modal type in this disposition because it is predicated on an upper voice which exceeds the upper range of the bassus by only a fifth and an overlap of voices which undercuts the usual descents associated with modal types. Indeed, the total range of the motet reaches only from A to g^1, less than two octaves. Example 5.26 provides a reduction of the *prima pars* of the motet.

The other motet to set the *Alma redemptoris mater* antiphon also incorporates *Ave regina caelorum* (*Werken* 21); both chants appear with a final on C and no signature. *Alma redemptoris mater* is paraphrased in the superius and bassus; *Ave regina caelorum* in the altus and tenor. As Osthoff (1965:II,41) and others noted, the motet displays an obvious affinity with Okeghem's *Alma redemptoris*. Dahlhaus (1968/1990:271-2) pointed out the modal ambiguity which characterizes the *Ave regina* antiphon and the compromise effected in joining these two chants: *Alma redemptoris* has in effect been transposed from a final on F to a final on C; *Ave regina caelorum* has been 'transformed' by the removal of B-flat. Ultimately it is the *Ave regina caelorum* chant of the tenor which takes precedence in the double motet as the tenor moves toward a long note setting of the chant and the three remaining voices join together in the extended sequential imitation shown in Example 5.27.

Chant and cadential profiles. *Mittit ad virginem* most obviously displays the influence of its chant model in its cadential organization. The excerpt given in Example 5.28 displays a cadential sequence found in no other *Ut* motet—C,D,E,D,C—which is motivated by the chant itself (marked on the example with crosses) and set off by the voice pairs with which it is set (see also the cadential profile of the motet in Appendix 2). As in the *Re* motets, apparently anomalous cadences reflect a plainchant precedent.

Likewise, the conclusion of the *prima pars* of *Alma redemptoris mater* on A, rather than the more usual F or C of the *Ut(F)* tonality, follows directly from the chant melody. Interior phrases and cadential structure also conform to the chant model.

Repetition. The Marian antiphon *Regina caeli* (*Werken* S3) is most closely tied to its chant model of all the motets of the *Ut* tonality,[20] and the chant, with its 'alleluia' refrains, implies a formal structure based on repetition that is not only followed in this motet, but even extended. Osthoff's description of the motet as a 'polyphonicization of plainsong' (1965:II,42) is particularly apt. Table 5.2 outlines the textual (and musical) structure of the motet.

Table 5.2: *Regina caeli*, text structure[21]

	Text	Cadence	Alleluia	Cadence
I	Regina caeli laetare,	A	alleluia	F,F,C,F
	Quia quem meruisti portare,	(F) C, A D	alleluia	D,F,D,F, B^b ,F
II	Resurrexit sicut dixit, [Resurrexit sicut dixit]	C, C F,B^b C F	alleluia	B^b,F
	Ora pro nobis Deum	F	alleluia	C
	[Ora pro nobis Deum]	F	alleluia	A,C,D,F,F,F,C,F

[20]The motet is found in *BolC Q 20*. Noble (1984) also cites *BerlGS 7* (of which only the bassus partbook is now extant) as a source for the motet, but this motet does not match the incipit of either of the two settings of *Regina caeli* cited in Loge's study of the manuscript. *BolC Q20* is the single source for two Josquin attributions which have been questioned: *Ave maris stella* (see the discussion in chapter 4) and *Nunc dimittis*. Macey (1992) has shown that the *Nunc dimittis* was modeled on *Memor esto verbi tui*; Noble (1984) questioned the authorship of *Ave Maris stella* on unspecified stylistic grounds. The other motet attributed to Josquin in *BolC Q20* is *Domine ne in furore* (Ps. 6; see Chapter 4). At the least, the Josquin attributions of this manuscript must be subjected to further scrutiny.

[21]Reading left to right down the table reproduces the text order: i.e., Regina caeli laetare, alleluia. Quia quem....

As the cadence structure suggests, the tonal plan of the alleluia refrain is varied with each statement, but within a basic repetition scheme. The first three alleluias extend the repetition of the chant (in which only the first two alleluias literally repeat). The final alleluia is itself based on immediate repetition (see Example 5.29). Although based on a Mode 6 chant, this motet opens with a strong emphasis on a *ut-fa* modal type which directly reflects the melodic influence of the chant melody, given in Example 5.30 and which the extension of the alleluia refrain, as well as cadential emphasis, reinforces.[21] Like the *ut-fa* modal type in *Benedicta es* discussed below, this modal type operates at a local level and is ultimately subsumed by an *ut-sol* modal type. In one case, the cantus firmus is a Mode 6 chant, with a final on F; in the other it is a Mode 8 chant with a final on G, thus underscoring the similar treatment given to these modes in polyphony.

Both *Mittit ad virginem* and *Homo quidam fecit coenam magnam* (*Werken* 28) employ pre-existing melodies in a manner which lends itself to the repetition of small motives in the remainder of the texture. In the case of *Mittit ad virginem*, the chant itself uses a repetitive form, which is emphasized by the use of voice pairs cited earlier. Such repetition is extended in the bassus counterpoint at the conclusion of the *prima pars* to the use of short repeated motives (see Example 5.31).

The canonic distribution of the cantus firmus in short successive phrases predisposes the texture of *Homo quidam fecit* to repetition of short motives and voice pairs, as illustrated by the annotations on Example 5.32. The disposition of the cantus firmus canonically within the texture contrasts with the more extended

---

[21]This motet is the only one discussed in this thesis which adopts such a refrain structure, albeit a varied refrain.

melodies of the contratenor-bassus duos, one of which is given in Example 5.33.[22] Example 5.34 illustrates a similar use of repetition and trade-off of less concise melodies in the non-cantus firmus voices of *Mittit ad virginem.*

Ut(G)

Only one motet with a G final and no signature can be securely attributed to Josquin: the six-voice *Benedicta es, caelorum regina* (*Werken* 46). Krantz (1989:307) noted the resemblance of the motet to *Praeter rerum seriem*; the motets share generic similarities of cantus firmus distribution, text type, texture, and range. The motet's final on G derives from the chant model. The paraphrased chant is given in Example 5.35 in a simple outline of the superius (the tenor voice is furnished for the third verse during which the superius rests).

Lengthy free extensions of the chant occur in three places: the end of the first double versicle and the ends of the *secunda* and *tertia partes*. Each of these extensions moves strongly to emphasis on G and D through the associated species of fifth (*ut-sol* and *re-la* respectively), suggesting an *ut-sol* modal type. Emphasis on the Mode 8 repercussion, C, provides a registral connection across the paired verses of the sequence chant. The conclusion of the first double versicle is extended from the chant's cadence on G to a cadence on C. However, the free extensions accommodate the chant to an *ut-sol* modal type in spite of its Mode 8 features (see the reduction of the *prima pars* in Example 5.36.)

Compositional manipulation of the chant model produces a strong sense of processive motivic manipulation not inherent in the chant melody. The annotations on Example 5.35 illustrate two concise figures, used throughout the texture, initially

---

[22]See also the similar duos in bs 69ff and 88ff.

derived from the chant, whose pitch and rhythmic associations makes their derivation from the opening versicles undeniable and further argues for the large-scale ordering of the motet suggested by the reduction of Example 5.36. In addition to the distinctive extensions of verses 2, 5, and 6, repetition creates closure within the larger structure. Repetition by voice pairs and voice groups is the norm for the motet, like other six voice motets, and is set up by the opening chant statement in superius followed by tenor (see Example 5.37). That repetition pattern is extended at the end of the first verse to a three-part repetition by a statement of the chant in the altus. Similarly repetition marks the ending of the succeeding verses of chant (see Example 5.38). Closure of the *prima pars* at the focal text 'Ave, plena gratia' relies on concise statements of the two motives highlighted in Example 5.35, repeated immediately, moving from an overlapped four voice texture through five-voices to six for the concluding homophonic salutation. Table 5.3 summarizes the conclusion of the *prima pars*; the music is given in Example 5.39.

Table 5.3: *Benedicta es*, Verse 4, Repetition and Texture

Text	Music	Texture
Sanctificavit sanctam servavit,	Motive 2 "	4 vv imitation S,Q,A,T "
Et mittens "	Motive 1 "	4vv (A,T,B,6) + 2vv (S,Q) "
sic salutavit: "	Motive 2b "	5vv (S,A,T,B,6) 5vv (S,Q,A,B,6)
Ave plena gratia.	Chant in long notes in superius	6vv simple ctpt framed by S, 6

Motets with problematic attributions

Included among them the *Ut* motets are some of the most well-known and widely-disseminated of Josquin's motets: *Stabat mater dolorosa*, *Inviolata integra et casta es Maria*, *Ave Maria ... virgo serena*, and *Benedicta es caelorum*. Co-existing

with them are at least nine motets with less secure attributions, ranging from works that are almost certainly not by Josquin, to motets for which the bibliographic and stylistic evidence of authorship is equivocal, to those which in all probability do belong to the Josquin *oeuvre*. There are fewer works in the *Ut* tonality than the *Re* tonality and the ratio of questionable attributions to 'authentic' works is substantially higher. (4 of 32 works in the *Re* tonality, 9 of 21 in the *Ut* tonality.) Although questions of authorship are not the focus of this thesis, they resurface here inasmuch as the analytical observations offered impinge on the practice of using stylistic analysis to determine authorship in instances of equivocal documentary evidence.

All five psalm motets in the *Ut* tonality are ascribed to Josquin only in later German sources. Two of these—*Laudate, pueri, Dominum* and *Paratum cor meum, Deus*—have an earlier anonymous tradition. Similarly, the earliest source of *Planxit autem David* (*RISM 1504/1*) transmits the motet anonymously, while attributions to Josquin occur only in later German sources.[23] The anonymous transmission of these three motets is not particularly significant as far as evaluations of authorship are concerned, especially in the case of manuscripts or prints which offer no attributions at all. Nevertheless, these motets may belong to a transmission pattern similar to that which Rifkin (1991) and van Benthem (1989) independently suggested for *Absalon fili mi*, arguing that Josquin's name was attached to the motet posthumously in a German source. Unlike the securely attributed motets, all three set Old Testament texts—two psalms and a lengthy non-liturgical excerpt from the book of Kings. Given the lack of any securely attributed psalm motets in this tonality and the conflicting attribution of *Planxit autem David*, discussion of this entire group of motets will be delayed until Chapter 8.

---

[23]See Chapter 8 on the attribution of this motet.

The other Old Testament motet, *Descendi in ortum meum* (*Werken* S6), presents a rather different case: the work is attributed to Josquin in the Alamire MS *VienNB Mus. 15941*, and the text and accompanying chant are taken from a commonly set Vespers antiphon. Noble (1984) questioned the attribution of the motet on unspecified stylistic grounds, van Benthem (1989) on account of its anonymous transmission in *LonBLR 8.G.vii*; but it fits comfortably within the tonal criteria established by the motets discussed in this chapter, and obvious similarities with the tonal procedure of *Stabat mater* may be noted. Both motets establish the *ut-sol* modal type in the opening gesture; both create tonal focus on the modal type through the upper register of the superius; both make extensive use of D as cadential support (compare Examples 5.4 and 5.5 above with Example 5.40).

Descendi in ortum meum extends the final at the conclusion of statements of the *ut-sol* modal type through repeated cadential activity. The extension plays on the weakening of cadence by lack of basizans support. The strongly-voiced cadence in bar 26 of Example 5.41 arrives from and returns to a bassus-superius sonority which supports the cadence to the final by a third below.

The extension of *fa* (B-flat) in the superius is treated with a relatively static extension of B-flat over a bassus G (see Example 5.42). In this excerpt, the ten-bar extension of *fa* is followed by a similar extension of *mi* (bs 41-53) which then continues in the *ut-fa* modal type.[24] The *re* cadence in b. 65 prepares a return to the *sol-ut* modal type characteristic of the motet as a whole with the basizans sequence D →G→C(→F). The return to the register and modal type of the opening accompanies

---

[24]The extension of *fa* is treated here locally much as it is in the *Re(G)* tonality. As described in Chapter 4, such local extension of *ut-fa* types in the context of a *Re(G)* tonality inevitably conclude in a clear *re-fa* type. *Descendi in ortum meum* instead returns immediately to *fa*. *Ut-fa* modal types are relatively infrequent among the securely attributed motets on any final.

an extended repetition of the text 'revertere' (bs 55-81). *Descendi in ortum meum* clearly follows the syntax of its short *Song of Songs* text in its use of modal types. Table 5.4 gives the text segmentation and cadences that accompany each line.

Table 5.4: *Descendi in ortum meum*, text and cadences

Text	Motet cadences	Chant cadences
Descendi in ortum meum, ut viderem poma convallium	C / F F / F	C F
et inspicerem si floruisset vinea et germinassent mala punica.	F / A F	A F
Revertere, ut intueamur te.	$B^{\flat}$ /G / C / F F	F F
Allelluia	F / F / C / F / F	F

The reduction of Example 5.43 illustrates the simple form of the motet which suggests an A B A coda form implicit in the word 'revertere'. The motet is based on a Mode 7 chant, transposed to F with a B-flat signature.[25] The compressed range of the interior section of the motet reflects the melodic emphasis of the chant itself, although the emphasis on *fa-ut* is more marked than that of the chant. In its chant

[25]Osthoff (1965:II,112) observed that this motet had nothing in common with motets on the same text by Fevin, Lebrun, and Dujardin. However, Drake (1972:I, 234-8) pointed out the same underlying chant in the anonymous setting of *RISM 1502*. See the chant in Drake (1972:II,303). The chant is clearly stated in the tenor and superius and forms the basis of points of imitation. This setting points to another problem for a modal categorization *a la* Aron. It is based on a Mode 7 chant, but Aron would never recognize an F as final for Mode 7. Similarly, some of the motets discussed in this chapter based on Mode 6 chants and C would (and were) considered by Aron to belong to Mode 8 because of the final on C. Such arbitrary distinctions are removed with the more general nomenclature of the 'ut' tonality proposed here.

relationship, sectionalized elaboration, and tonal emphases, *Descendi in ortum meum* is most reminiscent of *Regina caeli.*[26]

The final motet in this tonality about which questions of attribution have been voiced is the burial prayer *Absolve, Quaesumus, Domine* (*Werken* 82). Just (1965) challenged the motet's attribution in his review of it publication in the *Werken*, but its authorship has not been seriously questioned since Antonowycz's defense (Antonowycz 1966). As the single setting of a burial prayer, the motet stands apart from the other motets with F finals and from the *Ut* tonality generally. 6-voice motets on *Ut* are relatively rare: only *Absolve, quaesumus, Domine* and *Benedicta es.*[27] In its canonic cantus firmus treatment, the motet accords with the other large-scale settings of the *Ut* tonality.[28] The cadential framework of the motet is determined by the four free voices, and the closely overlapped and almost constantly present chant phrases in the long note values of the altus-tenor canon rarely participate in the cadence scheme. The overall influence of the chant is undeniable, however: two internal cadences to G, anomalous in the *Ut(F)* motets, and the conclusion on A—this is the only *Ut(F)* motet to so conclude—directly reflect the chant and coda-like addition 'requiescant in pace. Amen'. The free voices and chant are most clearly integrated in this concluding section (see Example 5.44).

Similarities may be drawn between the motivic concision and repetition which characterizes the free voices of the motet and that of *Homo quidam fecit* and

---

[26]See Table 5.2 and Examples 5.29 and 5.30.

[27]On the authorship of two other 6-voice motets with F finals, *Sic Deus* and *Christus mortuus*, see Milsom (1982).

[28]I.e., *Inviolata*, *Homo quidam fecit*, and *Benedicta es.*

Inviolata. However, the opening imitative passage of *Absolve, quaesumus, Domine* is unprecedented among the *Ut* motets. Antonowycz cited the first eight bars of the motet (given in Example 5.45) and adduced precedents for the sequence of fourths from a number of sacred and secular works, drawing particular attention among them to *Misericordias domini* and the *Pater noster*. This figure is more closely associated with the *Re* tonality, but also occurs in *Ut* motets.[29] To Antonowycz's list might also be added the sort of sequential inversion which opens the *tertia pars* of *Inviolata* (see Example 5.46).

What is tonally unprecedented about the opening of *Absolve, quaesumus, Domine* in the *Ut* motets is not the motive itself, but the way in which the imitation is extended when the chant canon enters (see bs 8ff, Example 5.45). The conclusion of the superius sequence (b. 13) signals not only the arrival of *sol* in an implicit *ut-sol* modal type that will be extended for the entire motet, but also contains a melodic figure that recurs in the superius at significant junctures in the motet and signals the final closing activity. The reduction given in Example 5.47 illustrates the extension of the superius c^2 across the length of the motet. Simple outer-voice patterns, relying on sequential bassus fourths are repeated, even though suggested by no repetition of the chant itself (see Example 5.48).

Observations of 'uniqueness' in tonal construction argue neither for nor against Josquin's authorship in the absence of another composer to whom the motet might more reliably be assigned, and the unusual features might well be connected to the singularity of the motet's text-type among the *Ut* motets.[30] Its transmission in a

---

[29]Antonwycz cites *Stabat mater*, bs 80-85 and *Benedicta es*, bs 99-107. The latter is simply a sequence of basizans cadential motion rather than the basis of a point of imitation.

[30]Various hypotheses have been advanced suggesting the motet as a lamentation on the death of Philip the Fair (Elders 1976:528).

single mid-century Spanish source likewise argues neither for nor against Josquin's authorship although it is consistent with a Spanish reception of Josquin that favoured works for five and six voices and that preferred liturgical cantus firmi.[31]

Ultimately, questions of attribution are unlikely to be decisively answered by stylistic analysis, although the observations offered here at least refine the debate by offering a systematic study of tonal aspects of these motets and suggesting compositional norms associated with particular text types and so forth. Not surprisingly, motets with attribution and transmission in primarily, if not exclusively, German sources coincide with text type: psalms, lamentations, and lections as opposed to Marian antiphons and sequences. As Chapter 4 argued, text types associated with a reciting tone necessitated a different compositional approach; the lack of any such securely attributed motets in the *Ut* tonality makes a point of comparison for that group of motets more difficult to ascertain.

* * *

The tonal and melodic profile of the motets of the *Ut* tonality is relatively restricted by comparison with the *Re* tonality, as the cadential profiles in Appendix 2 illustrate. Sectionalized elaboration of the modal type is most common for this tonality, reflecting the verse structure of the predominant sequence texts. Further, such sectionalized elaboration along with similarities of melodic type and mensural distribution may also suggest that at least three of the motets in this tonality may be related, albeit indirectly, to *laude*: *Ave Maria ... virgo serena*, *Mittit ad virginem*, and

---

[31]Picker (1976:257-8) argued that the existence of a seven-voice motet on the same text (with Josquin's name inserted in the text) in a mid-century Piacenza manuscript confirmed the authorship of the work in question, but such evidence need suggest no more than that the composer of the Piacenza *Absolve* associated the motet in question with a 'mythical' Josquin some years after his death.

Stabat mater, unlike the sequence motets (and responsory) based on a canonic cantus firmus which clearly represent the approach to setting sequence texts which Strunk (1977) effectively defined as a motet sub-genre. The choice of final follows that of a chant model. Like the motets of the *Re* tonality, the motets of the *Ut* tonality confirm Josquin's reliance on a pre-existing melody or scaffolding device.

CHAPTER 6

MI TONALITY

Tonal Conventions of the *Mi* Tonality

The eighteen motets of the *Mi* tonality (listed below in Table 6.1) have often been discussed from the perspective of rhetoric and modal affect; such examinations have taken as their starting point Glarean's description of compositional license and the commixture of 'dorian' and 'phrygian' (e.g., Meier [1956]) or identified rhetorical devices in the manner of Burmeister (e.g., Macey [1985]). More broadly-based tonal analyses of these motets, usually still from a modal perspective, have proved problematic.[1] As I argued in Chapter 3, modal types function in the *Mi* tonality as in

---

[1]For example, Dahlhaus (1968/1990:269) concluded that the motets with endings on A must be viewed as Dorian, Phrygian, or a mixture of the two, and that 'the Aeolian mode, the prototype of the harmonically tonal minor mode, was foreign to Josquin'. Recent studies by Krantz (1983) and Novack (1977) explicitly considered aspects of 'Phrygian' tonality. Krantz considered nine motets attributed to Josquin; his primary criterion for including a work was its conclusion on E in the lowest sounding voice. He eliminated the genealogies from consideration because of their use of the plainchant associated with their texts which he argued might preclude them from reflecting 'normal Phrygian melodic behavior' (:40). He also eliminated the *De Profundis* (5vv) because of its canonic structure, and *Domine ne in furore tuo* on account of its low voice ranges. The remaining nine motets on which his study was based thus consisted of the five psalm motets which first appear in late German sources, the lection *Responde mihi* also transmitted only in late German sources, and two motets with conflicting attributions (*Magnus es tu Domine* and *De profundis* [low vv]). See below for a discussion of the source traditions of these motets. The only overlap between the works Krantz studied and those discussed in this chapter is the hymn cycle, *Qui velatus facie fuisti*. Although his intention in thus circumscribing the motets for study was to establish the norms of unambiguously Phrygian motets, his sample group may in fact reflect German preferences of the 1520s or later for 'closed' tonal structures. Because Krantz relied on Glarean's terminology, he had no choice but to exclude motets concluding on A as 'Aeolian' rather than Phrygian, but see above regarding Dahlhaus's view of these same motets. The exclusion of the genealogies, the low voice *Domine ne in furore* (especially in light of the inclusion of the low voice *De profundis*), and the five-voice, canonic *De profundis* is more arbitrary. It should be noted that motets circulating widely in

the *Ut* and *Re* tonality, reflecting distinctive polyphonic patterns associated with the melodic conventions of the final and tonality. From that perspective, the 'difficulty' of this tonality resides not in the works themselves, but in the view from either extreme of an evolutionary 'modal to tonal' model exemplified in arguments like those of Krantz (1983) and Novack (1977).

Although the *Mi* tonality encompasses tonal characteristics identified by Krantz, Novack, and others as 'phrygian', its most salient feature as witnessed by examples from Josquin's motets is tonal ambiguity, an admittedly unlikely attribute with which to introduce a discussion of tonal coherence. It was precisely this feature of the *Mi* tonality, completely alien to the nature of modal categorization, which caused theorists like Glarean and Aron to make conflicting modal assignments of works from this tonality and to invoke the notion of compositional 'license'.[2] More recently Dahlhaus (1968/1990), Meier (1956 and 1974/1988), and others have noted a long-standing difficulty in distinguishing the plagal and authentic modes which would be associated with this tonality, even in otherwise obviously modally-ordered repertories.

German sources fit more neatly into Glarean's Phrygian category. See the discussion of the psalm motets in Chapter 8.

Novack's more wide-ranging essay touched only tangentially on the subject of this chapter—considering Phrygian features in triadic tonality of works from Bach to Wagner and Bartok, with passing mention of Josquin's *Missa Pange lingua*—but the evolutionary perspective he adumbrates distorts the relationship of modality and tonality. Novack espouses the view that the Dorian mode is the forerunner of minor, Lydian and Mixolydian of major, and that 'the Phrygian mode, when absorbed by polyphony, remained the unique exception, successfully resisting mutation that reflected the path leading to major-minor absolutism' (1977:87).

[2]See the discussion of *Miserere mei Deus* in Chapter 2.

Table 6.1: *Mi* Motets

Mi (E)

Motet	Text	C.f. mode	Clefs	System	Final
Psalms					
Misericordias Domini	psalm comp.		c1-c3-c4-f4		E[G],A,A[E]
Domine ne in furore (Ps. 37)	psalm (sel. verses)		c4-c4-c4-f4		A[E],E[G]
Miserere mei Deus	psalm (with refrain)		c1-c3-c4-c4-f4		E,E,A
De profundis (5vv)	psalm with add.		c1-c3-c4-f3-f4		E[B]
+*De profundis* (low vv)	psalm		c2-c4-f3-f5		A[E],E
*First appearance in late German source:					
Domine exaudi	psalm		c1-c3-c4-f4		E[B],A[E],E
Domine Dominus noster	psalm		c2-c3-c4-c4-f4		E[B]
Caeli enarrant	psalm		c1-c3-c4-f4		A,A,E
Domine ne projicias me	psalm comp.		c1-c4-c4-f4		A[E],E
Jubilate Deo	psalm		c1-c4-c4-f4		E,E
Genealogies; lection					
Liber generationis	genealogy	3	c1-c3/c4-c4-f4		E[G],A,E
Factum est autem	genealogy	3	c1-c4-c4-f4		E[G],A[E],G
*First appearance in late German source:					
Responde mihi	lection		c1-c3-c4-f4		E[B],E[B]
Christological					
Qui velatus	hymn cycle	var.	c1-c3/c4-c4-f4		E,E,A,E,E,E
O bone et dulcissime Jesu	prayer		c1-c3-c4-f4		E[B],A
*First attribution in late German source:					
Magnus es tu			c1-c4-c4-f4		A[E],E

Mi(A)

Mensuration motets					
Huc me sydereo	poem /antiphon	4	c1-c4-c4-f4-f4	b	A,D[A]
Ave nobilissima creatura	prayer / antiphon	4	c1-c4-c4-c4-f4-f4	b	A,D[A]

+Attribution insecure; see Table 6.2

*Discussed in Chapter 8

The treatment of the final and termination in the *Mi* motets reflects aspects of pre-existing melodies, register, and text types. The chant-based motets, *Qui velatus* and the genealogies, conclude with a sonority built on the final.[3] Support of the final by a bassus a fifth below becomes the norm for the other motets of this tonality. Macey (1991:169) postulated a date of *c.* 1480 for the hybrid psalm motet *Misericordias Domini* and suggested that it was 'the apparent forerunner of Josquin's more famous settings of complete psalms: *Memor esto verbi tui*, *Miserere mei Deus*, the five-voice setting of *De profundis* and *In exitu Israel*, among others' (:174). In its overall cadential ordering (*prima pars* closing on E, *tertia pars* on A) it serves as the model for the later multi-partite motets of this tonality: *O bone et dulcissime Jesu*, *Miserere mei Deus*, and *Huc me sydereo* (and its companion *Ave nobilissima creatura*). By contrast, the motets transmitted or attributed only in post-1537 German sources conclude uniformly on E.

Cadential emphasis on the final is understated in this tonality (see the cadential profiles in Appendix 2). Melodic, harmonic, and cadential emphases are most diverse in the *Mi* tonality and reflect the boundary pitches of the overlapped hexachords in relation to the final. While emphasis on C and A might well be expected in *Mi(E)* motets since these are the repercussions of Modes 3 and 4 respectively, G is equally prominent as a secondary tonal area, for which there are also strong precedents in chant.[4] The extended *mi-fa*, E-C, replicates the hexachord nomenclature of the most characteristic melodic pattern of this tonality, *mi-fa*, E-F. The *mi-fa* pattern is extended imitatively at the fifth above (i.e. B-C) and by addition of B-flat (*fa super la*) at the fifth below (A-B-flat) and imitative schemes moving in

---

[3]The exception is *Factum est autem*, which, like the chant it quotes, concludes on G.

[4]See the discussion of the genealogies below.

either direction are equally common. Similarly, imitative motives which start on pitches other than the E-B or E-A axis frequently emphasize C or G. The *re-la* fifth, D-A, is often used to extend A, particularly as the boundary of a *mi-la* modal type, and again, there are frequent chant precedents for the use of such melodic figures. Thus the *Mi* tonality encompasses an extraordinary range of possibilities both cadentially and melodically which turn on the association of its primary structural pitches with other tonalities (*A la mi re* in conjunction with the *Re:re-la* modal type; *C sol fa ut* in conjunction with the *Ut: ut-fa* modal type).

Figure 6.1: Hexachordal configuration of the *Mi* tonality

[A	B♭	C	D	E	F	G	A]
E	F	G	A	B	C	D	E
Mi	fa	sol	la				
		ut	re	mi	fa	sol	la
					ut	re	mi

It is often asserted that three related characteristics of the E-modes weaken tonal focus: 1) melodic emphasis on the fourth and sixth degrees in lieu of the species of fifth (presumably to avoid melodic outlines of the tritone); 2) the frequent use of B-flat in Mode 3 and 4 chants which distorts the species of fifth; and 3) the unavailability of basizans motion in cadences to E (and B) in the standard cadential patterns associated with all other finals. However, these are only problematic if viewed retrospectively from a vantage point which privileges a tonic-dominant model of tonal organization; yet they create a distinctive tonal profile that plays on the alternative tonal emphases inherent in the polyphonic adaptation of the melodic features associated with a *Mi* final. The more varied tonal means associated with this

tonality correspond to an infrequency of literal chant quotation and a tendency toward large-scale organization.[5]

The distinction between 'final' and 'termination'[6] is essential to the tonal organization of the motets of the *Mi* tonality, particularly the psalm settings. The elaboration of *A la mi re* and *C sol fa ut* as the focal points of melodic and cadential motion frequently relies upon borrowed patterns from the *Re* and *Ut* tonalities, suggesting at a local level the tonal ambiguity to which I referred above. The opening point of imitation in *O bone et dulcissime Jesu* is a case in point. The imitation opens with the *re-la* fifth characteristic of the *Re* tonality, continuing to the *fa* above, yet the next phrase is suggestive of the *Ut* tonality, while the final phrase fills in the *la-mi* fourth of the *Mi* tonality. However, as the reduction in Example 6.1 suggests, each of these patterns is a simple melodic elaboration consistent with the primary areas of focus in the *Mi(E)* tonality.

The two modal types associated with the *Mi* tonality, *mi-la* and *mi-fa*, strongly imply harmonic support by sonorities built on A and C in the *Mi(E)* tonality, hence the lesser emphasis on the final in this tonality. Indeed, given the melodic features of this tonality, harmonic extension of the final in conjunction with the upper boundary of the *mi-la* modal type is impossible.[7] But to cast the motets of this tonality as 'aeolian' due to the prominence of A, while reshaping the primary relationships in the harmonic context of tonic, third, and fifth (i.e. A=I, C=III, E=V)

---

[5]See the *Mi* examples cited in Chapter 3 from *Miserere mei Deus* and *Domine ne projicias me.*

[6]See the discussion of the psalm motets of the *Re* tonality in Chapter 4 and Example 4.64.

[7]That is, as is the case with the *Ut:ut-fa* modal type, the upper boundary of the modal type is dissonant with the final and thus will require some other local harmonic support. Similarly, although the upper boundary of the *mi-fa* modal type is consonant with the final (a sixth), harmonic support by a third or fifth is much more likely.

fundamentally misconstrues the melodic and contrapuntal processes underlying the *Mi* tonality.

Example 6.2 outlines the ranges of the *Mi* motets. A registral upper limit of c^2 is consistently used with *mi-la* modal types and an associated bassus registral extreme of E or F. Motets which use a *mi-fa* modal type are set slightly higher, with a two-and-a-half octave range from G to d^2, the standard registral disposition among the motets as a whole. The upper superius d^2 is frequently extended through local tonal focus as a neighbour to c^2, the *fa* of the *mi-fa* modal type. This tonal feature recalls the mediant of the third psalm tone and is a tonal resonance that may be connected with the association of this tonality and psalms as a primary text type. (See for example the graph of *Miserere mei Deus* in Chapter 3, Example 3.18.) The motets in Example 6.2 are divided into two groups on the basis of attribution. Of those in the first group, the lower settings all conclude on E, while only one of the settings with the higher superius register does (three conclude on A, one on G). By contrast, as noted above, the motets attributed or transmitted only in late German sources all conclude on E in the bassus, regardless of whether the range extends to the low E.

Since examples from the *Mi* tonality were treated extensively in Chapter 3, I will proceed in this chapter rather differently from the chapters on the *Re* and *Ut* tonalities. Following an overview of the text types, finals, and sources of the motets classed in the *Mi* tonality, I will examine these motets according to sub-groups defined by text and compositional type: Christological texts not associated with a reciting tone, texts associated with a reciting tone (psalms and genealogies), and the mensuration motets. Motets with problematic attributions are discussed briefly at the end of this chapter and further in Chapter 8.

The Motets of the *Mi* Tonality

The eighteen motets of the *Mi* tonality include the fewest securely attributed motets (nine) and the highest percentage of works with questionable attributions of any of the three tonalities. In contrast to the *Re* and *Ut* motets, most of the *Mi* motets set texts associated with a reciting tone—psalms, genealogies, and a lection (13 of 18)—and texts that are Christological in orientation. The only Marian motet, *Ave nobilissima creatura*, belongs to the pair of closely related mensuration motets that comprise the only *Mi(A)* examples in this tonality.[8] Both the lack of Marian texts and the relative infrequency of plainchant models quoted directly in these motets (only the genealogies, mensuration motets, and hymn cycle *Qui velatus* incorporate pre-existent melodies) distinguish the *Mi* motets from those in the *Re* or *Ut* tonalities.

Table 6.1 above lists the motets of the *Mi* tonality by final and text type. The dissemination and attribution of the motets of the *Mi* tonality present the most complex picture of any of the three tonalities; Table 6.2 gives a full overview of the sources of these motets. Six of the eighteen motets first appear in late German sources. The low voice *De profundis* is attributed to Champion in *VienNB Mus. 15941*. *Magnus es tu Domine* appears anonymously in *RISM 1504/1* and attributed to

---

[8] *Huc me sydereo* is the other mensuration motet. See the discussion of *Huc me sydereo* and *Ave nobilissima creatura* below. *Quando natus est* and *Rubum quem viderat*, the second and third motets of the *O admirabile commercium* cycle (a Marian cycle) set mode 3 and 4 chants and use some conventions of the *Mi* tonality, but as I suggested in Chapter 4 above, do so in the context of a larger *Re* orientation. The two motets are not considered here outside the tonal context of the cycle.

Finck elsewhere.[9] Finally, doubts about the authorship of *Ave nobilissima creatura* have recently been voiced.[10]

The chronological grouping of the earliest sources of the *Mi* motets coincides with the text types. The first sources of the genealogies and *Qui velatus* date from 1503 and 1504. The group of securely attributed psalm motets were all published over a period of three years between 1519 and 1521.[11] Similarly, the six-voice paired version of the mensuration motets was first published in 1519. The posthumously-attributed psalm motets all appear in German sources dating from the mid-1530s at the earliest. *KasL 24* is the source common to many of these motets. The only Lection, *Responde mihi*, first appears much later in *RISM 1545/2* and a contemporary mid-century source casts doubts on its attribution.[12]

---

[9]Its attribution to Josquin occurs only in sources connected to Glarean: the *Dodecachordon*, *MunU 322-5*, and *SGallS 463*.

[10]Such doubts were aired by Rifkin, van Benthem, and myself during the discussion following papers in the session 'Analysing Josquin' at the Conference of Medieval and Renaissance Music, Royal Holloway and Bedford New College, London, 1990. See also Brown (1991b:202). Although the motet appears with *Huc me sydereo* in at least one source which dates from Josquin's lifetime (*RISM 1519/2*), the version of *Huc me sydereo* in that print is the six-voice one that represents a later tradition. On the sources of *Huc me sydereo* and the view of the sixth voice as a later addition, see Cummings (1990) and Rifkin (1992).

[11]The earliest manuscript sources for the psalms date from only slightly earlier, c. 1515 for *Misericordias Domini*.

[12]*LeidGA 1439* with the ascription 'incertus auctor'.

Table 6.2: Sources of the *Mi* Motets

Motet Psalms	Italian MS	Italian prints	German prints	Other MS	Earliest sources
Misericordias Domini	CorBC 95-6/Paris BNN 1817 1515-16 FlorBN II.I 232 (bs 1-159) 1516-21	1519/3	1537/1 1559/2		CorBC 95-6 1519/3
Miserere mei Deus	FlorL 666 1518 LonBL 19583/ModE F.2.29 1535 VatS 38 1550-63	1519/2 1521/3	1520/4 1537/1 1553/4 1559/1	DresSL 1/D/3 1550 60 DresSL Grimma.59a 1560 KasL 24 1534-50 MunBS 10 1525-30 MunU 327 (anon.) 1543 SGallS 463 (with added bass by Bidon) 1540 or later	FlorL 666 1519/2
Domine ne in furore (37)	LonBL 19583/ModE F.2.29/ParisBNN 4599 1535	1519/2	1538/6 1553/4	HeilbS XCIII/3 after 1566 (from 1538/6) HradKM 21 1st half 16th c. KasL 24 1534-50 RegB C120 (anon.) early 1520s RosU 71/1 second half 16th c. ZwiR 81/2 mid 16th c.	1519/2
De profundis (low vv)		1521/3 [1521/7]	1520/4 1539/9 Glarean	DresSL 1/D/6 (b.) 1560-80 ErlU 473/4 1540-1 KasL 24 1534-50 RegB C120 (anon.) early 1520s VienNB Mus.15941 (att. Champion) 1521-31 (Netherlands court complex)	1520/4
De profundis (5vv with add)	VatS 38 1550-63	[1521/4]		KasL 24 1534-50	1521/4
Domine exaudi			1553/6	KasL 24 1534-50	KasL 24 1553/6
Domine Dominus noster (5 vv; tenor c.f.)			1553/4	DresSL Grimma.59a 1560 HalleU 1147 1540-75 KasL 24 (anon.) 1534-50	KasL 24 HalleU 1147
Caeli enarrant			1538/6 1553/4	KasL 24 1534-50	KasL 24 1538/6
Domine ne projicias me			1538/6 1553/5	BerlPS 40031 2nd quarter of 16th c. HeilbS XCIII/3 (anon.) after 1566 (from 1538/6)	1538/6 BerlPS 40031
Jubilate Deo			1539/9	DresSL 1/D/6 (b) 1560-80 DresSL 1/D/501 (s,a) 1560 VienNB Mus. 15500 (anon.) 1544	1539/9

Table 6.2 (cont.)

Motet **Genealogies / Lection**	Italian MS	Italian prints	German prints	Other MS	Earliest sources
Factum est autem		1504/1		LonRC 1070 (Inc. anon.) 1510-15/1533-6	1504/1
Liber generationis	CorBC 95/6 /ParisBNN 1817 (anon.) 1515-16 FlorBN II.I.232 1516-21 VatS 42 (anon.) 1507-12 FlorBN Magl 107bis 1510-13	1504/1	1538/3 J1555 1559/2 Glarean	ToleF 23 1520-35 LonRC 1070 (anon.) 1510-15/1533-6 DresSL 1/D/505 (anon.) 1510-30 MunBS 10 1525-30 UppsU 76c 1530?	VatS 42 1504/1
Responde mihi			1545/2	LeidGA 1439 ('incertus auctor') 1559	1545/2

Motet **Christological**	Italian MS	Italian prints	German prints	Other MS	Earliest sources
Qui velatus		1503/1		WrocU 428 1510-30	1503/1
O bone et dulcissime Jesu	BolSP 29 (anon.)(Spataro ms) 1512-27 VatS 45 1511-14	[1521/7]		LeidGA 1442 (anon.) 1559 MunBS 41 (with two added voices) after 1547 SGallS 463 1540 or later	VatS 45 BolSP 29 (anon.)
Magnus es tu		1504/1 (anon.)	1538/3 (Finck) Glarean	RegB B.211-5 ('Josquin, alii H.F') 1538-43 MunU 322-5 1527 (copied in Basel under Glarean's direction) SGallS 463 1540 or later VienNB Mus.15500 (anon.) 1544	1504/1 (anon.)

Motet **Mensuration Motets**	Italian MS	Italian/French prints	German prints	Other MS	Earliest sources
Huc me sydereo	BolC R142 1515-30 FlorBN II.I.232 1516-21 VatS 45 1511-14	1519/2 J1555	1538/3 1558/4	BrusBR 9126 1505 BudOS P6 after 1558 CopKB 1872 1541-3 LeidSM 1440 1559 LonRC 1070 1510-15 RegB 893 1570-80 SGallS 463 c. 1540	BrusBR 9126
Ave nobilissima creatura	BolC R142 1515-30	1519/2		MunU 401 1536-40 ToleBC 13 1553-4	1519/2

Christological texts not associated with a reciting tone

Two motets fall into this category: *Qui velatus facie fuisti* (*Werken* 11 and 4) and *O bone et dulcissime Jesu* (*Werken* 96).[13] *Qui velatus* is a six-part partial setting of the Bonaventura hymn cycle for the Office of the Passion[14] which quotes various partial chant melodies in the superius as suggested by its text. *O bone et dulcissime Jesu* appears to be one of the relatively few motets free from reference to a pre-existing melody or chant association.[15]

Like *O Domine Jesu Christe*, with which *Qui velatus* was published, clear connections are established among the *partes* of the motet; formal procedures and tonal processes are intimately related with simple reiteration and repetition serving as the primary agents of tonal coherence. The most obvious such repetitions occur at the conclusions of *partes*. All cadence to the final, E; the similarities of these conclusions are illustrated in Example 6.3. These interior sections are ordered progressively: bs 199-210 of the *tertia pars* are followed by the short homophonic *Honor et benedictio*, a miniature setting in the style of an elevation motet, and the *quinta pars* introduces the final cadential extension by expanding the point of imitation of the tenor-bassus pair of the earlier cadences (bs 70, 142, and 204 respectively). The *quarta* and *sexta partes* also share endings; the cantus firmus associated with the final line of text determines the ending of the *sexta pars*.[16] The

---

[13]*Magnus es tu Domine*, which would also fall into this category, is discussed in Chapter 8.

[14]On the origin and selection of the text of this motet, see Drake (1972:344).

[15]I have been unable to determine the origin of the motet's devotional text.

[16]On the cantus firmus of *Qui velatus* see Sparks (1963:395 and 482n83) and Elders (1976:541). The final line of each of the five verses of *Christum ducem*, the complete hymn for

opening points of imitation state the primary imitative and motivic framework of the motet and its emphasis on A.[17] The opening motive and its interval of imitation highlight the four structural pitches of the *Mi(E)* tonality: A/C and E/G (see Example 6.4). The repetition of the superius in the opening of the *quinta pars* (b. 322) invokes the other side of the imitative axis on A that is common in the *Mi(E)* tonality: the fifth D - A.

The formal organization of the six *partes* of *Qui velatus* depends on the progressive use of repetition summarized in Table 6.3.

Table 6.3: *Qui velatus*, repetition and formal organization

Pars	Exact Repetition	Repetition by voice pairs	Sequential repetition
I	16-30 = 1-15 41-6 = 35-40		47-52/53-8/59-64
II	137-48=65-77	TB89-95 = SA95-102	SA123-6/TB126-9/SA129-32
III	187-98=169-80 199-210=137-48=65-77	SA169-174=TB175-180	149-54/155-60
IV		239-66 alternation of SA/TB pairs 275-301 alternation of AB/ST pairs	ST304-7/TB307-11
V	322-31=312-21 varied 378-83=204-10=142-8=70-7	332-83 alternation of SA/TB pairs	
VI	401-6=384-9 431-8=418-23 varied 464-9=447-52 494-97=502-5 506-12=304-11	384-407 alternation of SA/TB pairs 447-69 alternation of SA/TB pairs	

Lauds which makes up the *sexta pars* of *Qui velatus*, quotes a line from another hymn. The melody associated with that text is quoted in the superius. Sparks alludes to quotations in the other *partes* of *Qui velatus*; the employment of pre-existing melodies in this cycle as well as the compilation of the text of the motet from the office hymns deserves further study.

[17]Drake (1972:344) argued that the tonality of the motet 'centers on A, but this A mode is somewhat ambiguous, behaving at times like a transposed "phrygian" (with B-flat notated accidentally or else strongly implied by context), and elsewhere like a transposed "dorian".' The ambiguity to which he referred is the essence of the *Mi(E)* tonality.

The internal structure of the final *pars* mirrors that of the motet as a whole with clear verse delineation by the use of four-voice texture for the final line of each of its five verses. Similarly, the two verses of the *quarta pars* are distinguished by different voice pairs; the final line of the first verse is marked by a full four voice texture, that of the second by a change of mensuration. Literal and sequential repetition, most prominent in the first three *partes*, is replaced by a textural reliance on voice pairs in the last three *partes* and repetition on the larger scale. Exact repetition is most characteristic of the outer *partes*. Sequential repetition relies on the *la-mi* fourth and falling third motives characteristic of this tonality in two juxtapositions illustrated by Example 6.5. In the first excerpt (bs 47-64), the falling fourth motive of the superius is repeated in descending thirds; in the second excerpt the stepwise descent of falling thirds creates a larger *la-mi* descent (bs 149-69). In both the *la-mi* fourth occurs both at the level of E and A. Similar sequential repetition of imitative patterns in the *secunda pars* links chains of fourths and points of imitation beginning on D/A and C/G, an imitative pattern that recurs regularly in the *Mi(E)* motets (see Example 6.6).

In contrast to *Qui velatus*, tonal organization in *O bone et dulcissime Jesu* relies less on extended repetition and more on concise motivic arrangement and immediate repetition of small motives. Motives related to the characteristic *mi-fa-mi* (E-F-E) melodic shape occur throughout the motet. The two excerpts in Example 6.7 illustrate the more varied repetition techniques associated with this figure and its continuation. First stated in b. 40, the figure (bracketed in the example) is repeated with a new counterpoint, then extended and repeated again with new counterpoint in a four-voice texture in preparation for the cadence to A. As a simple stepwise motive, devoid of its initial tonal significance, the motive becomes the basis for homophonic declamation as in bs 88-97. The following voice pairs introduce invertible counterpoint.

As commonly happens, repetition creates closure at the end of the motet. The final petition of *O bone et dulcissime Jesu* intensifies the primary motivic and tonal materials of the motet as a whole. The superius states the falling third motive three times; the interval of imitation—A-D//E-A reinforces the tension of the *Re* and *Mi* elements of the motet; the stepwise declamatory motive also returns; and the motet concludes with the *mi-fa* modal type embellished by the upper neighbour, d^2 (see Example 6.8). Example 6.9 illustrates the prominence of D throughout the motet—melodically, imitatively, and cadentially—which creates a play of tonal focus, but one which always returns to the *mi-fa* modal type and conventions of the *Mi* tonality.

Motets on texts associated with reciting tones

Psalm motets

The most distinctive trait of the motets of the *Mi* tonality is the large number of texts associated with reciting tones. Strunk (1974) described the musical characteristics of later sixteenth-century motets as they reflected text types of the Gregorian repertory and suggested that with respect to motet settings of psalms and canticles the choice of text 'leads to ... a homophonic or at best quasi-polyphonic texture and ... an emphasis on sonority and rhythmic declamation. At the same time...the melodic interest [is] less sustained.' This description holds true for the psalm motets of Josquin, but as the discussion of the *Re* motets indicated, these works are accorded a distinctive tonal treatment that goes beyond the textural distinction attached to the mid-century sub-genre Strunk was addressing. Brown provides a succinct overview of the shifting choice of motet text type which is mirrored not only in the *oeuvre* discussed in this thesis, but in the tonal associations of that *oeuvre*:

> [T]he central tradition of non-political motets in the fifteenth century ... concentrated on Mariology almost to the exclusion of other topics. Marian motets increased in number and expanded the ways in which

> they glossed the Virgin's life as the fifteenth century wore on. It was not until the last decades of the century that the subject matter of the motet widened to include a substantial number of texts for other votive occasions as well. In the generations after Petrucci...[i]n addition to writing more and more motets based on the liturgy, and especially on antiphons and responsories, composers also increased greatly the number of motets commemorating particular saints, and they began more regularly to set psalms, and especially those like the gradual psalms, the penitential psalms, and those said at votive services that are to be found in Books of Hours. (1990:765)

Particularly apt in this description is the place of the psalm motet and the observation that initially the psalm texts that were set were 'special', which accords well with the securely attributed psalm motets of Josquin. The psalm motets appear not to rely on quotation of pre-existing melodies, although some use scaffolding devices or canons. However, they do contain resonances of psalmody. The connection of the psalms set in the *Re* tonality is overt, including the setting of complete psalm texts, the inclusion of the doxology and antiphon, antiphon-like use of the opening verse as a refrain, and even obvious reference to a psalm tone. The psalms of the *Mi* tonality display a more general relationship to psalmody. Of the psalm motets appearing in pre-1537 non-German sources, two do not set complete psalm texts: *Misericordias Domini* is a compilation taken from several psalms (see Macey 1991) and *Domine ne in furore* sets selected verses of Psalm 37 for low voices. The other two psalm texts in this group, *De Profundis clamavi* and *Miserere mei Deus*, are set for five voices, rely on scaffolding devices (a three-voice canon in *De profundis*, an ostinato in *Miserere mei Deus*), and have special associations. Thus, all four set a 'special' text, all are densely motivic compositions, none is a straightforward setting of a psalm, none includes a doxology or antiphon, and none makes overt reference to a psalm tone although the resonances of psalmody are certainly perceptible. Significantly, all share with the *Re* psalm motets a tonal

ambiguity based on the play between *re* and *mi* which centers on *A la mi re* in imitative contexts, and all share the proclivity towards 'open' tonal endings.

The dense motivic style which characterizes the two four voice-motets in this category, *Misericordias Domini* (*Werken* 43) and *Domine ne in furore tuo* (*Werken* 39), has been the subject of extensive comment (e.g. Macey [1991] and Godt [1977]), as has the play between 'dorian' and 'phrygian' which seems to be the object of the tonal structure of the motets (e.g. Osthoff [1965:II,123-4] and Dahlhaus [1968/1990:254-5, 266-8]). A few short examples will suffice to suggest an interpretation of earlier studies of these motets in light of the perspective offered here. The overall motivic and tonal structure of *Misericordias Domini* relies on three prominent motives which reinforce the *Mi* tonality illustrated in Example 6.10: a) the stepwise *mi-fa-mi* motive (introduced on E, imitated at two levels on A *mi* and B *mi*, and extended as a generic stepwise motive); b) emphasis on A through repetition of the falling *la-mi* fourth (and the associated emphasis on C with the *fa-ut* fourth); c) extension of the *fa* of the *mi-fa* modal type by emphasis on d^2 as a neighbour note and points of imitation opening with the rising thirds A-C / E-G; and d) sequential use of a falling third motive beginning from the *fa* of the modal type.

Like *Alma redemptoris mater* (see Example 5.24 above), with which it shares a similar range, the motivic overlap and repetition in *Domine ne in furore* results in the near-static extension of the primary sonorities of the motet, as the excerpts in Example 6.11 illustrate. The registral placement circumscribes the modal type, suggesting a simple *mi-fa-mi* paradigm that is connected with a more prominent harmonic emphasis on C than the *mi-(la)-fa* type seen in *Misericordias Domini*.

The two five-voice psalm settings under consideration here, *Miserere mei Deus* (*Werken* 37) and *De profundis clamavi* (*Werken* 90), like all of the motets for more than four voices, incorporate scaffolding devices. The graphic analysis of

Miserere mei Deus in Chapter 3 (Example 3.18) demonstrates the 'resonance' of the third psalm tone for the tonal shape of the motet. For example, the structural pitches G, A, C, D comprise the intonation, reciting tone and mediant of the third psalm tone; the reiterated descent from C to G is the end of one of the accepted psalm tone endings of the third tone, and so forth.[18] Meier (1956:84-6) focused on what he described as the 'continually varying tonality' of the motet which he interpreted in a rhetorical context, and Macey (1985) further argued for a rhetorical interpretation of the motet. The graphs provided here do not undermine such an interpretation, but suggest the compositional logic with which subtle nuances of text may be reflected within the context of a tonally coherent whole and the conventions of the psalm settings of the *Mi* tonality. Strategically placed immediate repetition, most often of rising thirds, is one of the hallmarks of Josquin's settings of complete texts associated with a reciting tone (see Example 6.12), as is the repetition which concludes the motet (see Example 6.13).

The three-voice canon of *De profundis clamavi* reflects an underlying connection to psalmody as well as holding symbolic significance.[19] The reduction in Example 6.14a shows the differentiation of the verse halves throughout the motet. The motet is based on a *mi-la* modal type. Verses 2, 3, 5, 6, and 7 all extend A for the first half verse, and G for the second half verse, suggesting a resonance of the *tonus peregrinus*, although it is never stated directly as in *In exitu Israel*, and the reliance on the *mi-la* modal type places the recitation in a different tonal context. The motet is broadly based on fourths which frame the central *mi-la* fourth of the

---

[18]I am grateful to Professor Richard Sherr for highlighting these correspondences in a private communication about my graph of the motet.

[19]See Kellman (1976:189-90) on the signficance of the canon 'les trois estas sont assemblès pour le soulas des trespasses' in *VatS* 38.

modal type (see Example 6.14b). That is, verse 1 approaches the *la* of the modal type by means of *ut-fa* and *re-sol* fourths. The central verse, verse 4, introduces the registral high point of the motet, moving to c^2 and *ut-fa* fourths. The concluding Kyrie elaborates the recitation pattern, but retains the basic motion from a^1 to g^1, which coincides with the conclusion of the bassus on E.[20] This differs from the conclusion of the works just discussed in this tonality which have two or more *partes* and in which the final *pars* concludes with an A in the bassus and relates to the recitation pattern as well as the fact that the motet is in a single *pars*.

Genealogies

In contrast to the psalm motets of the *Mi* tonality, the two genealogies, *Liber generationis* (*Werken* 15) and *Factum est autem* (*Werken* 16) are closely related to a reciting tone. In both, the tone is clearly stated, principally in imitation in superius and tenor. The Mode 3 melodies of both genealogies emphasize E and G as the pitches of recitation and cadences (see Example 6.15).[21] The opening verse of *Liber generationis* incorporates this imitative framework in a simple extension of the *fa* of a *mi-fa* modal type, with the usual bassus support. *Factum est autem* retains the chant in the superius, but supplies the normal *mi* cadence in b. 22 even though the tenor chant continues to G. Imitation at the fifth below creates an imitative framework in both motets based on the C/G and A/E fifths. In *Liber generationis*, this imitative framework serves as the basis of a simple repetition scheme demarcated

---

[20]Osthoff (1965:II,126) interpreted the motet as belonging to the 'D-mode', probably on account of the role of A and its association with *re-la* fifths: 'Ebenso bestehen Uberein stimmungen in der tonartlichen Struktur, die nicht zufälliger Art sein können; denn auch die Funeralienmotette prägt überwiegend den D-modus aus bei mehrfacher Ausbiegung in Klangbereiche mit einem b (vereinzelt auch es) und endet schließlich überraschend auf dem E-moll-Dreiklang'.

[21]See Noble (1985:21) on the sources of the melodies used in both. I was unable to see an unpublished paper by Professor Noble which discusses the sources of these chants further.

by opposing textures of high and low voices, although the placement of the chant and time interval of imitation is varied (see Example 6.16).

The overall cadential ordering of these motets is directly tied to their source chants. The ending of the *secunda pars* of *Factum est autem* on G results from the chant, stated clearly in the tenor (see Example 6.17). A cadence to E with a tenor extension in bs 390-1 (as in the opening phrase of the motet; refer to Example 6.15b) would certainly have been a possibility, but the tonality of this pair of motets is in essence 'chant-based' and easily accommodated within the basic parameters of the *Mi* tonality.[22] Not surprisingly, given the nature of the tone on which the motets are based and the length of the texts set, repetition plays an important role in the elaboration of theses motets. The hallmark rising third, a feature of the chant itself is frequently the basis of such repetition (see Example 6.18). More common in *Factum est autem* is the motivic use of the cantizans cadential figure and varied repetition of individual voices in new textural combinations (see Example 6.19). Immediate literal repetition, sequential repetition and simple varied repetition are also common responses to the reciting tone as illustrated by the excerpts of Examples 6.20 and 6.21. Repetition is also a primary feature of the concluding section of each *pars* of both motets (see Example 6.22).

Liber generationis extends the cadential and imitative cycle of fifths with a rare cadence on B and continues through descending fifths (B→E→A→D) before returning (via A) to a strong cadence on E (see Example 6.23).

The approach to setting a gospel text seen in the genealogies will be explored more fully in Chapter 7. While these motets exhibit features of the *Mi* tonality, they

---

[22]See Chapter 7 for a further discussion of chant-based tonality and gospel motets.

stand to one side of its main association with special psalm motets in which the reciting tone is treated more generically.

Mensuration motets

The motets *Huc me sydereo* and *Ave nobilissima creatura* are the only motets in this tonality which use an A final and B-flat signature, and are distinguished compositionally by their use of a mensuration tenor.[23] Josquin divides the six distichs of the humanistic text of *Huc me sydereo* (*Werken 32*) at the midpoint.[24] Set against the text form is the proportional arrangement of the tenor cantus firmus, the antiphon *Plangent eum* (see Example 6.24) which consists of four phrases of near-equal length, repeated three times.[25] Figure 6.2 illustrates the distribution of the cantus firmus in relation to the text form. In the union of these two forms, the internal structure of each is maintained. Only once does a phrase of the cantus firmus continue through an internal division of the text (b. 99).[26]

---

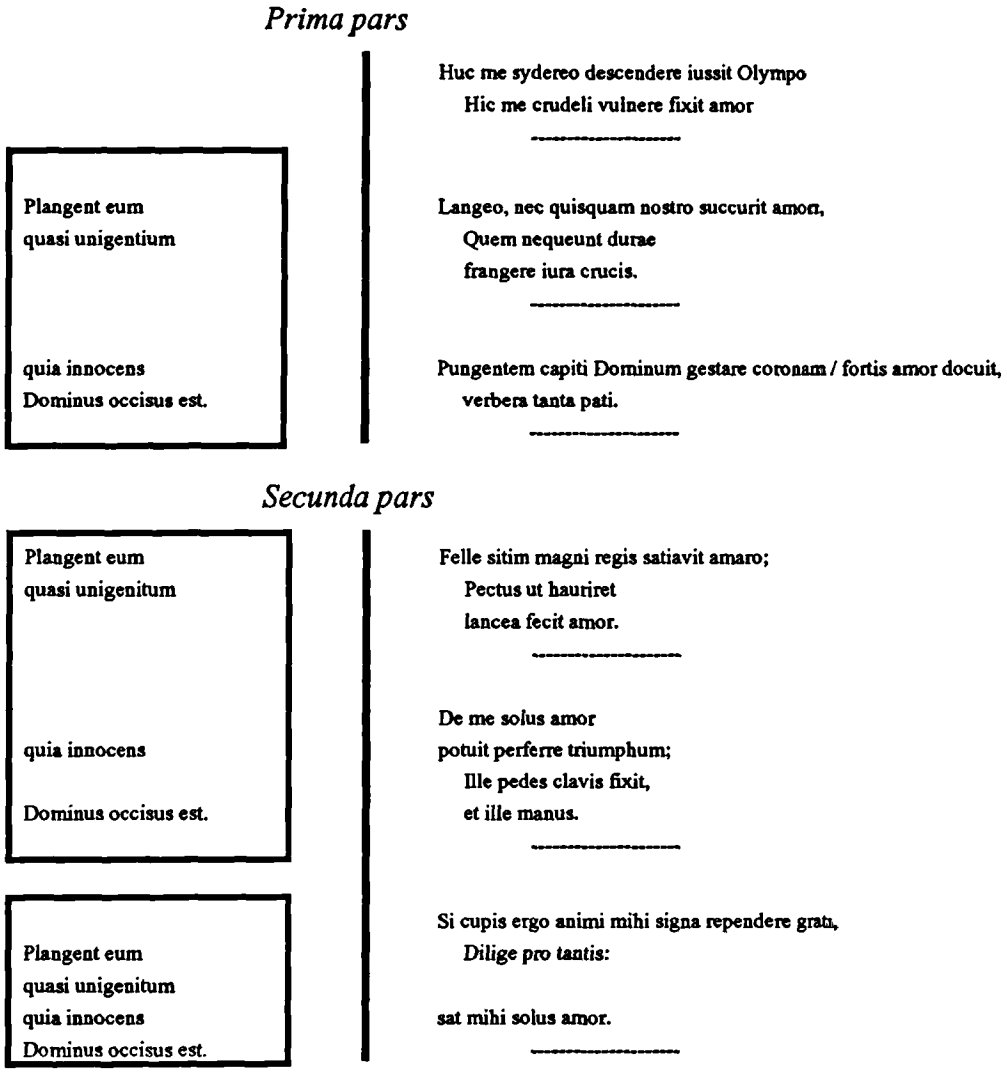
[23]I have included the sixth voice (A1) in all the examples from *Huc me sydereo*, but it should be considered as an added voice rather than part of the integral structure of the motet, whatever its ramifications for the hypothesis of a *Huc me sydereo /Ave nobilissima creatura* cycle. This conclusion concurs with Noble (1976) and is also supported by the source work of Cummings (1990). For an opposing view, see Blackburn (1987:277n135). The exceptional nature of the sixth voice is apparent in the voice ranges of the motets, as Fallows (1985:51) pointed out. While the superius appears to have an unusually wide range, in fact the lower fourth is used only in one instance of the motet, in a text-related context. It is instructive to note the different integration of the sixth voice in *Ave nobilissima creatura*, as apparent from Elders' tabulation (1971:71).

[24]On the text source, see Lowinsky (1969).

[25]On the cantus firmus, see Elders (1971) and (1976). The notation of Example 6.24 follows Elders.

[26]The break coronam / fortis is ignored. See Figure 6.2.

Figure 6.2: *Huc me sydereo*, cantus firmus and text



The Mode 4 cantus firmus has a range f-e^1, final on A, and B-flat signature.[27] *A la mi re* as a tenor final sets up a prominent play between local tonal focus on *re* and *mi* and creates a singular ordering of pitch materials: the repercussion of Mode 4 (the second species of fourth) is not only contained within the first species of fifth as

[27]Eucharius Hofmann, the only theorist so far as I am aware to cite this motet, describes it as Mode 4 in his *Doctrina de Tonis seu modis musicis* (Greifswald, 1582) cited in Meier (1974/1988:412).

in the *Mi(E)* examples, but is now added to it. To consider this pitch collection as a simple 'aeolian' scalar pattern is to overlook its significance for tonal organization (see Example 6.25).

The openings of both *Huc me sydereo* and *Ave nobilissima creatura* are based on a paradigm connected with the *Re(D)* tonality. B-flat, although signed here, is functioning just as the *fa supra la* of the *Re* motets (see Example 6.26). The B-flat signature affects the polyphonic workings of the motet, however, and the *A mi* final facilitates interaction with the *Re* tonality on two levels: *Re(D)* and *Re(G)*. The *Ut(F):ut-sol* modal type is also contained in the pitch collection of these motets. Indeed, the opening of the motet signals the important role of *A la mi re* for the tonal structure. The *A mi* tenor final presents a special possibility, that of moving freely between the melodic patterns of *Ut, Re,* and *Mi* tonalities, in a way which is rarely encountered even among the *Mi* motets, but which epitomizes the tonal role of *A la mi re*. The cadential profile, by contrast, is among the most restricted of the *Mi* motets.

Musical parallels express both the form and meaning of the text.[28] At the broadest formal level, this may be seen in the conclusions of the two *partes* of the motet, which rely on parallel six-three sonorities and repetition of the same small motive. Verse divisions of the text are delineated by textural procedures, cadential patterns, motives, and repetition. The motet's opening illustrates the voice pairs that govern the contrapuntal structure: S/A2 and B1/B2. Repetition and varied repetition by the bassus pair provide closure at textual subdivisions (bs 10 and 30 in Example 6.27). The second phrase uses full imitation in pairs for the small word-generated

---

[28]On text-music relationship in *Huc me sydereo*, see Osthoff (1965:II,91-3), Finscher (1979:67-8), Noble (1976 and 1984:34-6), Elders (1971) and Cummings (1990:10-12).

motive on 'descendere' (bs 19ff) in a motivically-saturated passage initially above a static bassus. Varied repetition is an important textural procedure in the motet as demonstrated by the conclusion of the 'descendere' motive in Example 6.27 where alteration of time and pitch interval of imitation create cadential propulsion.[29]

After the opening of the motet, each text phrase (verse, half-verse, and interior division) is set off by repeated note patterns—whether the texture is imitative or note-against-note counterpoint—until the final distich, in which the altus carries the idea to its limit and intones the text (see Example 6.28).

The tonal interplay of the cantus firmus and the motet are less obvious than the textual-formal relationship. Apart from the conclusion of the motet, similarities between the cantus firmus and melodic material in the other voices of the motet are of a generic nature, as the two instances cited in Example 6.29 illustrate. In the first (the opening of the *secunda pars*), the opening chant phrase is not continued. The second is a standard cadential figure.

Formally, the phrase-by-phrase settings of the three statements of the cantus firmus show parallels. The final pitches of the chant phrases—D, D, G, and A—correspond to the principal cadential pitches of the motet, although the correlation is not direct. That is, the motet's cadences on G do not coincide with the conclusion of the third phrase of the cantus firmus; instead they prepare the entry of the first phrase of chant. Example 6.30 gives the occurrences of the chant phrases in parallel and illustrates similarities among the polyphonic counterpoints of each phrase. The opening phrase (Example 6.30a) moves in each case (by means of varied repetition by voice pairs) from a cadence on D (the point at which the excerpts begin) to a cadence on G and a new texture for the tenor entry of the chant. The superius

---

[29]See also bs 130-9 in which B2 repeats the altus line in a new polyphonic context.

counterpoints to the chant tenor are similar in the first and second statements of the first phrase. The second phrase of the cantus firmus (Example 6.30b) enters with a cadence on A, and in the second and third statements the bassus pairs temporarily drop out, leaving the tenor chant as the lowest sounding voice—the only times this occurs. The third chant phrase (Example 6.30c) closes on G, but the free voices instead emphasize the penultimate A cadentially, resulting in a disjunction of the poetic text and cantus firmus form. In the final statement of this phrase, the tenor is integrated rhythmically and melodically into the texture of the motet. The textural and motivic similarity of the close of the *prima* and *secunda partes* was noted above. The cadential ordering is the same as that frequently encountered in the *Mi* tonality, with the final cadence extended and supported by the bassus a fifth below (see Example 6.30d).

Like the psalm motets of this tonality, and the mensuration motets generally, *Huc me sydereo* is a densely motivic composition,[30] and the opening duo (given in Example 6.31) uses contrapuntal procedures characteristic of the motet as a whole. The sequential variant inserted in the alto imitation (bs 11-13) not only allows the upper voices to cadence, but also re-sounds the contrapuntal relationship of bs 5-7; bs 14-16 parallel bs 11-13. The result is a three-bar repetition pattern frequently encountered in the large-scale motets which corresponds to the mensural unit of the first cantus firmus entry. Motivic linking also occurs with the text-generated motive on 'descendere', which is linked into falling lines. With the extension of the motive, the superius becomes the lowest voice in the texture and the complete 'descent' of both voice pairs encompasses the entire range of the motet. The arrangement of these

[30]On the 'constructivist' tendency of this motet and its aesthetic context, see Rifkin (1990).

motives emphasizes the ascending pattern G-A-D, significant pitches of tonal focus, which share a generic connection with the melody of the first cantus firmus phrase.

Motivic saturation in the free voices accompanies the long notes of the cantus firmus. The primary voice pairs are distinguished by circular, ostinato-like repetitions of small motives (see Example 6.32, bs 56-64). The concluding section of the *prima pars*, frequently cited for its affective text setting, highlights the use of motive and repetition. 'Verbera tanta pati' is repeated exactly in the bassus secundus and superius (B2 bs 104-6 = 109-11; S bs 106-8 = 111-13), while other voices and combinations are altered. Melodic expansion of the bassus motive, coupled with rhythmic diminution, appears in close imitation in all of the non-cantus firmus voices (bs 114-17). A small repeated motive above the final of the cantus firmus (bs 119-22) reinforces the superius-altus pairing.

Two general motives pervade this motet. Both are common among the *Mi* motets: the falling third and a stepwise descending line. Example 6.33 shows the incorporation of the falling third and the gradual melodic expansion coupled with rhythmic diminution of the *prima pars*. There, the motive is a prominent part of the imitative texture. In the *secunda pars*, it is less so, at a different pitch, and primarily in the bassus and altus.

Example 6.34 illustrates the integration of motivic material across an interior textual division and cantus firmus phrase. The distinct material of the primary voice pairs gives way to imitation and repetition of a descending sixth (bs 78ff). Like the motive on 'descendere', the altus continues the superius descent (bs 80-5). The falling sixth in a rhythmically augmented form then becomes the basis of the new disposition of voice pairs.

While the superius lines of the *prima pars* were connected through the incorporation of the falling third, in the *secunda pars*, the characteristic shape is the

falling stepwise fifth from c^2 to f^1 (corresponding to the pitch material of the final cantus firmus phrase) and introduced in the *prima pars* in conjunction with the first phrase of the cantus firmus. The altered ending of the phrase beginning in b. 164 and the changed tonal shape in b. 173 lead to the final incorporation of the cantus firmus in the texture (b. 183; see example 6.35).

Huc me sydereo draws together diverse formal, structural, and tonal material in an interweaving most clearly illustrated by the conclusion of the *secunda pars* (see Example 6.36). The elision of verses 5 and 6 through the bassus pair, the culmination of the repeated-note motives in the altus imitation, the melodic alteration of the superius for the cantus firmus entry all prepare the final integration of the cantus firmus and the rest of the motet texture. An echo of the opening motivic material occurs at the final cadence. The emblematic cantus firmus unites melodically, rhythmically, tonally, and rhetorically the manifold strands of form and structure held together by the tonal possibilities of the *A la mi re* final in *Huc me sydereo*.

Elders (1971) and Milsom (1989 and 1990) outlined the melodic, contrapuntal, and formal similarities between *Huc me sydereo* and *Ave nobilissima creatura* and I will not further enumerate them here. Brown (1991b:206-7) identified the text of *Ave nobilissima creatura* as a prose prayer attributed to St. Augustine. There can be no doubt that one work was clearly modeled on the other, and the five-voice *Huc me sydereo* is generally thought to be the first work of the pair.[31] Rifkin (1990) argued persuasively in favour of the northern source tradition of the five-voice version of *Huc me sydereo*, and examined the aesthetic climate which fostered such a

---

[31]Milsom (1990) argued to the contrary, suggesting *Ave nobilissima creatura* as the first of the pair to be composed.

motet. The source tradition for *Ave nobilissima creatura* is equivocal, but all sources attribute the motet to Josquin. Nevertheless, the model-imitation relationship of the two has raised questions about the authorship of *Ave nobilissima creatura.* Milsom likened the relationship of the two to a pair of symmetrical altar panels—one on the conception, the other on the passion. The motets share the same basic tonal structure as a result both of the near-identical melodies of their chant cantus firmus, the mensuration tenor, and common melodic and contrapuntal material.[32] With *Huc me sydereo* as the only other *A mi* motet among Josquin's *oeuvre*, speculation about the authorship of *Ave nobilissima creatura* on purely stylistic grounds would be hazardous at best and Milsom's caution (1990) about using shared material among motets as an indication of 'forgery' is well-taken. What has gone previously unnoticed, however, is the relationship of the text type of *Ave nobilissima creatura* and its tonality. The *Mi* motets suggest most strongly of any of the three tonalities Josquin's association of text type and tonal convention, an association countered by the Marian text(s) of *Ave nobilissima creatura.* The tonality of *Ave nobilissima creatura* reflects its chant antiphon, which in turn was chosen for its similarity to the *Plangent eum* antiphon on which *Huc me sydereo* was based. A broader study of *Ut, Re,* and *Mi* tonalities from the perspective of the tonal preferences of individual composers and conventions associated with particular text types along with on-going study of modeling and *imitatio* may yet shed light on the enigmatic relationship between *Huc me sydereo* and *Ave nobilissima creatura.*

---

[32]The denser motivic texture of *Ave nobilissima creatura* results in almost exactly twice as many cadences on each of the primary cadence tones. Compare the cadential tables in Appendix 2.

Motets with Problematic Attributions

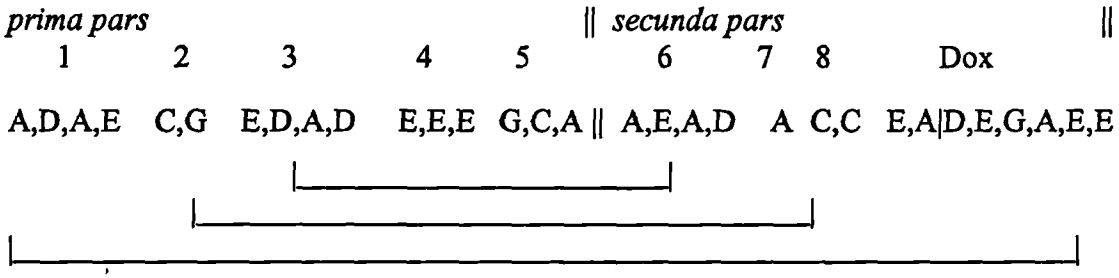
The results of this thesis might be used in the service of evaluating probable authorship, so I have adopted a cautionary stance on questions of attribution, attempting to treat less securely attributed motets separately, even though such questions are not the primary purpose of my analytical investigation. The four-voice *De profundis* (*Werken* 47) is attributed to Champion in *VienNB Mus.15941* (a manuscript from the Netherlands court complex, dated in the 1520s); the earliest printed source of the motet is *RISM 1520/4*, the Grimm and Wirsung anthology edited by Senfl. The motet's attribution to Josquin has never been seriously questioned; if anything, Glarean's citation of the motet as an example of commixture of Dorian and Phrygian assured it a prominent place in the Josquin *oeuvre* and reception history (Glarean 1547/1965:II,266-7). Meier (1956) provided an extended commentary on the motet and I will provide only a brief overview of the relationship of this motet and the *Mi* motets discussed above. Although the 'expressive' use of low clefs is often cited, the motet maintains three distinct voice ranges rather than the two characteristic of other low-voice motets (e.g. *Domine ne in furore*). The setting of the psalm text is straightforward and unlike the other *Mi* psalm motets discussed in this chapter, includes a doxology. Like the five-voice *De profundis*, it concludes on E, but the E follows as an extension of an A in the bassus beneath a S-T cadence to E, b. 164 (see Example 6.37).

The imitative patterns of the motet highlight the inherent conflicts of the *Mi* tonality. Like other motets of the *Mi* tonality, the *secunda pars* moves from imitation at the C-G fifth to the D-A fifth. In this case, the imitation is extended yet further to the A-E fifth (see Example 6.38).

Such juxtaposition of fifths also extends to D-A and E-B fifths in imitation, emphasized through repetition. The overall emphasis is on a *mi-fa* modal type (see Example 6.39), but the restricted upper range precludes the usual contrast and extension through d^2.

The tonal organization of the motet as a whole recalls the *Re* psalm motets in its contrast of tonal areas represented by the choice of cadence tone, which frame the central verses of the motet. This motet does not exhibit the motivic density which characterizes the other *Mi* psalm motets, nor does it incorporate the most common melodic figures and repetition of the other *Mi* motets.

Figure 6.3: Cadential outline of *De profundis*



* * *

The motets of the *Mi* tonality support Brown's evaluation of text types and chronology cited above from a tonal perspective. These motets are in a sense the 'experimental' works at the bounds of the tonal features of the repertory. The *Mi* motets utilize the widest range of melodic and harmonic resources of any of the three tonalities. The *Mi(E)* motets regularly include cadences on E, A, C, G, and D, and on a local level incorporate modal types from both the *Ut* and *Re* tonalities by means of the hexachordal role of the final and the melodic patterns associated with it. Tonally straightforward psalm motets which set complete texts appear only in later German sources and are taken up in chapter 8; tonal ambiguity is the essence of the *Mi* motets securely attributed to Josquin.

CHAPTER 7

'CHANT-BASED' TONALITY: THE GOSPEL MOTETS

This chapter focuses on two settings of gospel texts attributed to Josquin, *In principio erat Verbum* (*Werken* 56) and *In illo tempore assumpsit Jesus* (*Werken* 79). Two other Gospel settings which appeared in the *Werken*, but whose attribution to Josquin is now doubted are not discussed here.[1] (The genealogies, *Liber generationis* and *Factum est autem*, are discussed in Chapter 6 above). The few who have commented on *In principio* and *In illo tempore* reached similar conclusions. Osthoff's description of the tonal structure of *In principio* is typical of discussions of this motet:

> Ungewöhnlich ist die tonale Struktur der in f-jonisch stehenden Motette insofern, als ihre beiden ersten Teile auf D schliessen, während der dritte Abschnitt auf D beginnt, dann aber die Grundtonart wieder deutlich hervortreten lässt. (1962: II,105)

Osthoff also characterized *In illo tempore* as 'ionian' (1962: II,103), as did Novack, who commented on

> the paucity [of harmonic motion] despite the fact that the motet is in the Ionian mode, in which opportunities for harmonic movement are greater than in any of the other modes. (1970:198)

---

[1]The two motets are *In illo tempore stetit Jesus* (6vv) (see Sparks 1976:324-6) and [Mouton] *Missus est Gabriel Angelus a Deo* (5vv) (see Lowinsky 1968:III,219-28).

Complementing Osthoff's assessment of the tonal structure of *In principio* as 'ungewöhnlich' is Beebe's recent description of *In illo tempore* in her study of motets ending on C, although she ultimately arrives at a different modal categorization:

> [C]loser scrutiny reveals that the actual tonal center of the work is F: there are a large number of cadences on F, and a strikingly large number on A (mm. 30, 35, 39, 81, 86) and very few on C.... In short, this seems to be a motet in Mode 5 on F, the archaic form without the flat, ending on a secondary degree [C]. (1991:18)[2]

Beebe speculates that the ending on C, which she finds 'surprising', is due to the text, which changes affect in the last line. (See Figure 7.5, below.)

Urquhart (1982:56-9), in one of the more detailed discussions of these two motets, groups them with those works which in his view evade modal categorization. He notes that both motets emphasize the third below the final cadentially and melodically (that is, D in *In principio* (Final = F, *cantus mollis*) and A in *In illo tempore* (Final = C, *cantus durus*). He suggests that this emphasis might support in both cases an assignment to the 'phrygian' mode (transposed to A by the flat signature of *In principio*). In spite of noting the parallels between the two motets, he makes no mention of what I believe to be the crucial underlying similarity: both are settings of gospel texts.

The detailed analyses presented below illustrate not only the inappropriateness of modal labels for describing tonal relationships in these works—if the various contradictory descriptions of 'ionian,' 'archaic Mode 5,' and 'phrygian' were not illustration enough—but also signal the dangers of viewing such motets apart from their liturgical associations, if not liturgical function.[3] These motets represent the same

---

[2]I am grateful to Dr. Beebe for a typescript of this paper.

[3]See Cummings (1981) and Noble (1985) regarding the 'function' of motets. The most detailed discussion of the tradition of polyphonic settings of gospels is Moser (1931); see also Göllner (1969).

approach to setting gospel texts in a motet format—an approach which is characterized by the pervasive influence of the gospel reciting tone and which suggests a means of tonal organization which is best termed 'chant-based' tonality, and more specifically in these instances, 'gospel-tone' tonality.

In principio erat Verbum

The opening of the Gospel according to John is prescribed for two places in the liturgy: it is the Gospel for the third mass of Christmas, and more significantly, it is the text of the so-called 'Last Gospel'. The Last Gospel was traditionally recited at the end of mass, following the *Ite Missa est* and *Deo gratias*.[4] Although no archival references to performance of this particular text in a motet setting have come to light, this point in the liturgy is one of the places in which motets are known to have been incorporated in a para-liturgical context (Cummings 1981:47,51). While a motet might be substituted for the *Deo gratias*, it seems plausible that *In principio* would have followed the *Deo gratias*, either in place of, or simultaneously with, the priest's recitation of the Last Gospel.[5] Such use is similar to that which Jeremy Noble (1985:20-1) suggested for Josquin's other two large settings of texts from the Gospels, the genealogies, in respect of their place in the liturgy.

Josquin partitions the text into three *partes*. The text division is straightforward: the *prima pars* is the so-called 'logos hymn' (vv 1-5); the *secunda pars* begins with the

---

[4]See the rubrics in the *Liber usualis*, 7, and Harper 1991:124 and 303. I am grateful to Professor Patrick Macey for drawing my attention to the Last Gospel.

[5]I am grateful to Professor Anthony Cummings for extended discussion on where and how this motet might have been used. Some of the diary entries he has studied may support my suggestion that *In principio* would be especially pertinent at this point in the mass, and do not categorically suggest that the motet was a substitution for the *Deo gratias*, e.g.: 'Cantore cantarunt missam cum motteto post ita missa est etc' (cited in 1981:51).

'testimony' of John (vv 6-13); and the climactic 'Et verbum caro factum est' (v 14), traditionally marked by genuflexion (and thus a homophonic setting), opens the *tertia pars*.

While the Latin text does not retain the chiastic structure of the Greek original, it is nevertheless remarkable for its patterned organization, exemplified in the opening. (See Figure 7.1.) The repetitive character of the text is mirrored in Josquin's deployment of melodic material in the motet, a point returned to below.

Figure 7.1: Textual patterning, *In principio*, verses 1-2

In principio	erat	Verbum		
	et	Verbum	erat apud	Deum
			et	Deus
	erat	Verbum.	Hoc erat	
in principio			apud	Deum.

Josquin respects the syntactic structure of the text with two exceptions. The first is the apparent solecism by which a new point of imitation begins on 'quod factum est' and runs through 'in ipso vita erat' (see Example 7.1). However, this text division is not indicated in contemporary copies of the Vulgate or a contemporary missal (*Missale Romanum* [1474: I:20]), and the apparent misreading from a composer well-versed in Latin may be attributed to his adherence to his source text.[6] One other text division (shown in Example 7.2) is only minimally observed, but this may be a deliberate attempt to reflect the textual connection of the two sentences—'Non erat ille lux...' / 'Erat lux vera....' The failure to observe the textual punctuation here is significant for the large-scale durational and tonal structure of the motet and is discussed further below.

---

[6]This underlay is followed in all of the sources of the motet which I have examined: *ModD 9*, *MunBS 10*, *VatS 38*, and *1538*[3].

The Gospel Tone

As Krantz (1989:294) observed, and Noble hinted (1984:38), the gospel tone associated with the text has structural significance for *In principio*. The characteristic features of the gospel tone are noted on Example 7.3. While this is not an 'exact' match with Josquin's setting, the relationship is nevertheless clear.[7] However, Krantz's interpretation of the gospel tone's relation to modal classification is incorrect (possibly because he worked on the assumption that superius and tenor were mode-determining and thus 'structural' voices):

> The tone consists primarily of recitation on c' with an inflection down to a. Imitation of this interval at the fifth below in the motet introduces f, which fills out the Lydian diapente and presumably accounts for the use of mode 5 on f for the overall setting. (1989:294)

The primary characteristic of the tone is the *re-mi-fa* third; Josquin's setting in *cantus mollis* moves this interval to the notated pitches D-E-F. The tone occurs at the pitch level of F, not in the tenor, but instead with clarity and consistency in the altus ('contratenor' in some sources), as demonstrated by Example 7.4. It is difficult to suggest that the tone is being carried by the altus in the voice pairs of the opening, but it becomes readily apparent by reading that voice alone (see especially bs 95-110 in Example 7.6b).

The distribution of vocal ranges typical for the four-voice motets uses three distinct voice types with tenor and altus sharing the same range—the widest of the three voice types.[8] The vocal ranges of *In principio* are given in Example 7.5. A tentative

---

[7]Mattfeld (1959:123) appears to have overlooked the tone entirely when she grouped the motet with works in which 'the text is provided with a simple reading tone in the liturgy. The tone is largely or totally disregarded by the composer, and no other cantus firmus is used.'

[8]See Fallows (1985) for a discussion of vocal ranges, and a suggestion regarding performance of *In principio*.

suggestion may be made that the placement of the tone in the altus, rather than the tenor, reflects conventions of tenor finals and terminations; this is elaborated below.

The recitation formula as incorporated in the motet includes the falling third characteristic of the tone (the *metrum* or half close) but it also displays melodic features characteristic of the *Ut* tonality, especially in conjunction with syncopated cadential patterning to F. (This is indicated by the subdivision of the recitation column on Example 7.4.) The *fa-re* third is used consistently for full closes and the chant concludes on the reciting tone. Other chant-carrying voices are indicated on Example 7.4 only in the two instances when the tone is absent from the altus, but present elsewhere in the texture. Repetition or imitation of the tone in voices other than the altus has not been indicated. The tone dictates the cadential profile of the motet—internal cadences on F, full stops on D, and the conclusion on F—shown in Figure 7.2.

Figure 7.2: Cadential profile, *In principio*

In principio erat verbum, et verbum erat apud Deum,	C F C F			et Deus erat verbum.	D/D
		Hoc erat in principio apud Deum.	A		
Omnia per ipsum facta sunt..	F			et sine ipso factum est nihil	D
Quod factum est, in ipso vita erat, et vita erat lux hominum,	F F			et lux in tenebris lucet, et tenebrae eam non comprehenderunt.	- D/D
Fuit homo missus a Deo,	F/C			cui nomen erat Johannes.	D/D
ut testimonium perhiberet de lumine,	F			Hic venit in testimonium, ut omnes crederent per illum.	D D
Non erat ille lux,	F/F	set ut testimonium perhiberet de lumine.	(A)	Erat lux vera, quae illuminat omnem hominem venientem in mundum.	- - D
In mundo erat, et mundus per ipsum factus est,	F F F			et mundus eum non cognovit.	D
In propria venit,	F			et sui eum non receperunt.	D
Quotquot autem receperunt eum, his qui credunt in nomine eius: qui non ex sanguinibus, neque ex voluntate carnis, neque ex voluntate viri,	F F (F) F F/F			dedit eis potestatem filios Dei fieri, sed ex Deo nati sunt	(D) D
Et verbum caro factum est, et vidimus gloriam eius, plenum gratiae, et veritatis	F F/F F/F F/F	et habitavit in nobis	A/A	gloriam quasi unigeniti a patre,	D

Contrasting tonal material characterizes sections which omit the tone entirely and the last half of the motet establishes a series of alternating planes of tonal material defined by the presence or absence of the gospel tone. Figure 7.3 shows the intricate interweaving of note-against-note and imitative textures, voice pairs and full texture, and varied mensuration.

Figure 7.3: Presence of Gospel tone, *In principio*

Text	Gospel tone*	Texture**	Mensuration
In mundo erat,		i pairs	¢
et mundus per ipsum factus est,	+	i 4	
et mundus eum non cognovit.	+	nn 4	3
In propria venit,		i pairs	¢
et sui eum non receperunt.		nn 4	
Quotquot autem receperunt eum,	+	nn 4	
dedit eis potestatem filios Dei fieri,		i 2	
his qui credunt in nomine eius.	+	nn 4	3
Qui non ex sanguinibus,	+	i pairs	¢
neque ex voluntate carnis,	+	nn 4	3
neque ex voluntate viri,	+	i pairs	¢
sed ex Deo nati sunt.	+	i 4	
[*Tertia pars*]			
Et verbum caro factum est,	+	nn 4	
et habitavit in nobis,		i pairs	
et vidimus gloriam eius,	+	i pairs	
gloriam quasi unigeniti a patre,		nn 4	
plenum gratiae	+	i 4	
et veritatis.	+	nn 4	

*Presence of gospel tone indicated by +.

**Texture is described as imitative (i) or note-against-note (nn) followed by number of voices participating.

Thus, on several levels, *In principio* reflects the associations of the gospel text with the gospel recitation tone: in the cadential profile (of the overall organization of its

three *partes* as well as the interior arrangement of each *pars*); in its inclusion and embellishment of the recitation tone; and in the pervasive use of the interval of a third as a basis of points of imitation. But the motet is not simply a polyphonic harmonization of a recitation formula;[9] textual, textural, and melodic connections among the *partes* of the motet, while not independent from its gospel tone genesis, play an important part in establishing tonal coherence in the motet.

Repetition and Tonal Structure

Repetition of musical units underlies the structure of *In principio* at every level; the overall tonal organization of the motet is, in its principles of construction, analogous to the strongly patterned gospel text itself (see Figure 7.1, above) and the inherently repetitive recitation tone associated with it.

Immediate repetition. Immediate repetition in the motet includes repetition by voice pairs (a hallmark of the Josquin style) as illustrated by the opening of the motet (see Example 7.6a), and repetition which is tied to the recurrence of a word (or words), as in the phrases 'in testimonium' / 'ut testimonium' (see Example 7.6b.) Frequently, repetition of music (and text) is used for emphasis and closure. Immediate repetition with an added voice marks interior divisions of the text, as in the conclusion of the first verse (see Example 7.7). Similarly, closure is established in each of the three *partes* of the motet through musical and textual repetition. The *prima pars* uses exact repetition with extensions (Example 7.8a); the superius and bassus of the *secunda pars* repeat with variants down a third, following the falling third of the long-held recitation in the altus

[9]See Moser (1931:11 and passim) and Göllner (1969) for fauxbourdon-type and simple settings of gospels.

(Example 7.8b); and in the *tertia pars*, the homophonic declamation 'et veritatis' is repeated over the altus recitation (Example 7.8c).

Local repetition with long-term significance. The two most striking instances of repetition at the local level in the motet are characterized by motivic saturation, melodic units based on rising thirds, and the temporary absence of a clear reference to the gospel tone and its tonal influence. The first, on the words 'et sine ipso' may be a direct response to the negative text. Even here, however, the influence of the tone is unmistakable in the overall contour of the melodic lines: C-A in the superius and altus; F-D in the tenor and bassus (see Example 7.9). The second instance is an unusually extended section, spanning two verses of text with minimal demarcation (as noted above) and clearly marked at either end by imitative phrases and cadences to F (see Example 7.10). Like other such literal repetitions, which out of context may seem to border on the excessive, this section is strategically placed. It is built from repetition at the most immediate level—a three note figure—and as a whole has consequences for the overall structure of the motet. These two verses of text, tied together musically, comprise the most extended section lacking reference to the gospel tone, and are a striking textural as well as tonal contrast to the material which frames them. This section occurs at the durational centre of the motet and, I would suggest, argues for clear and careful compositional planning of the durational and tonal placement of events within the basic gospel tone scheme. The distinction which does mark the syntactic division of the text is subtle, but nevertheless important. The tenor breaks its repetition on the words 'de lumine' (boxed on the example) and with the bass articulates a (deliberately weakened) *mi* cadence on A, the significance of which is discussed below. A variation of the bassus pattern (indicated by the broken bracket on Example 7.10) is also introduced as a means of textual demarcation.

Repetition as formal determinant. Like the motivicity which connects the two sections of text and the interior groupings created by cadential patterning described above, repetition creates formal parallels of text sections. This is seen most clearly in the phrases 'in mundo erat' and 'in propria venit' in the *secunda pars* of the motet, given in parallel in Example 7.11. The repetition is characterized by temporal expansion which is necessary to accommodate the additional syllable of 'in propria venit' along with an exchange of altus and tenor. As shown on Example 7.11, each phrase concludes independently, but the next major text segment, 'Quotquot autem receperunt eum' opens with a varied musical repetition of the homophonic ending of verse 10. It is this series of partial repetitions which sets up the alternation (detailed in Figure 7.3, above) which prevails for the rest of the *secunda pars* and builds to the homophonic opening of the *tertia pars*, 'Et Verbum caro factum est'.

By a similar principle, a formal parallel is established on a large scale, among the *partes* of the motet, in the opening of the *prima* and *secunda partes*. Example 7.12 gives a common reduction between the two *partes* detailing the re-ordering and extension of common underlying paradigms. The reduction also illustrates the patterning procedure on which the melodic construction of the motet is based—analogous to, but not directly parallel with, the patterned construction of the gospel text.

Large-scale tonal organization

Repetitive units organize the pitch materials of the motet at a variety of levels, and it is in this context that the examples of motivicity and local re-ordering of paradigms described above are to be understood. Successive reductions of the *prima pars* illustrate this most clearly (see Example 7.13).

At the first level, five melodic paradigms, which recur throughout the motet, are shown as introduced in the *prima pars*. The first (A) is directly connected with the gospel tone, but occurs as both a *fa-re* and *sol-mi* third. As shown on the second reduction, paradigm B is a subsidiary figure, subsumed in larger groupings. C is the rising third associated with sections of motivic saturation. D, a *fa supra la* figure, occurs only once at the local level in the *prima pars* but several times in other sections of the motet. E is the *ut-fa* fourth.

These melodic paradigms are characteristic of modal types associated with a *Re* or *Ut* tonality, and a juxtaposition is set up by the two pitch levels at which paradigm A is used. This juxtaposition is clearest in the shift from *ut* to *re* at b. 18 and b. 66, and, as noted above, is suggested by the gospel tone itself. The new composite pattern (labeled X) in Reduction 2 is significant. Essentially a descent from f^2-a^1, it suggests the *fa-mi* pattern associated with the *Mi* tonality in the context of the flat system of this motet. It is divided variously in the motet at *la* or *sol*, as indicated in Example 7.14. The superius extends significant cadences with this melodic pattern, and it is this pattern with which the tenor marks the interior division of the central section of motivicity. A is more often than not the termination point of the tenor in many cadences, and at the conclusion of each of the *partes* of the motet. Observations of this sort were what led Urquhart (1982:56) to suggest a 'transposed phrygian' classification for the motet. It is possible, though, to refine these observations which centre around the role of the pitch A. Although cadences to A are infrequent in the motet, they are strategically placed, occurring durationally at the same point in each of the three *partes* of the motet (see Figure 7.2 above). The ending on *a mi* in the tenor also suggests the way tonal coherence is organized within the gospel tone framework. *A mi* does not function as the final of the motet, but the *mi* modal type associated with it, which occurs frequently throughout the

motet, connects the *re* and *ut* types spawned by the gospel tone as shown in the first reduction of the *prima pars* (see Example 7.15).

Such a mingling of *re* and *ut* types, with an ultimate dominance of the *Ut* tonality (as seen especially in the sections where the gospel tone is absent; see Examples 7.9 and 7.10 above) is a straightforward compositional method for the incorporation of the gospel tone into polyphony. The third and final reduction in Example 7.13 shows the way in which this is managed on a large scale: the interior sections are in a sense self-contained and two clear progressions move in an *ut-re-mi* succession of modal types, although only the *mi* melodic type is repeated and not with the usual contrapuntal framework of a *Mi* tonality:

Ut: *sol-mi-ut* (1-17) | *ut-mi-sol* (46-61)

Re: *fa-re* (18-25) | *la-fa-la* (60-65)

Mi: *fa-mi* (25-32) | *fa-mi* (66-end)

Central to the *prima pars* is a large-scale segment of paradigm A in contrary motion in the outer voices, the *fa-re* third of the recitation formula in a new context.

In principio uses the gospel tone much more regularly and literally than commentators have noted in previous discussions of this motet and the overall plan of the motet mirrors the tone's structural features. The conclusion of the *prima* and *secunda partes* on D, out of the ordinary for an *Ut (F)* work, is hardly likely to have given a sixteenth-century musician pause for thought since it follows exactly the full close formula of the gospel reciting tone. The tenor with its *A la mi re* termination and not the primary carrier of the gospel tone, provides a signpost for understanding the tonal organization of the motet with its *a la mi re* termination.

In illo tempore assumpsit Jesus duodecim discipulos suos

In light of the above, an interpretation of tonality in the setting of the Quinquagesima gospel from Matthew (Matthew 20:17-19), with the introduction 'in illo tempore', is more straightforward than the commentaries cited at the outset of this chapter might lead one to believe. Since procedures in this motet are similar to *In principio*, a brief analytical presentation of *In illo tempore* will suffice.

This Gospel text was prescribed for the *Missa in Honore Sancte Crucis* (*Missale Romanum* 1474: I:453) and the motet thus has a loose connection with the 'usual' subjects on which motets were based, as may be seen by the title of one of Petrucci's early anthologies: *Motetti De passione De cruce De beata virgine et huius modi* (*RISM 1503/1*). However, none of the early motet collections use Gospel texts, nor suggest the functional associations of the 'in illo tempore' incipit.

The most straightforward explanation of the tonal system is that *In illo tempore* is the *cantus durus* counterpart to the gospel tone as set in *In principio.*[10] This motet, dealing with only a small section of a passion gospel, is set on a much smaller scale, in a single *pars* without the textural and mensural variety that characterizes *In principio*, but the principle of tonal organization is the same. The reciting tone is C, imitated at various levels. Interior full closes are to A—Figure 7.4 shows the reiterated cadences at the end of each verse—and the motet closes on C.

---

[10]Novack (1970:196-8) notes both the significance of the third for the motet and its gospel tone resonance, but within a different frame of reference, as the quotation at the head of this chapter indicates.

Figure 7.4: *In illo tempore*, Cadential outline

Text	Cadences
In illo tempore	(C)
assumpsit Jesus	(C)
duodecim discipulos suos secreto	F
et ait illis:	A/A/A
Ecce ascendimus Jerosolimam	F/F
et Filius hominis tradetur	
principibus sacerdotum et scribus,	(F)
et condemnabunt eum morte.	A/A/A
et tradent eum gentibus,	
ad illudendum,	
et flagelandum,	
et crucifigendum.	(C)
et tertia die resurget.	C/C/C

The Gospel tone

The gospel tone appears primarily in the superius and tenor, although it is occasionally present in other voices and imitated throughout (see Example 7.16). The tone is absent only in small sections of cadential extension and there are no contrasting sections like those of the larger work *In principio*. Unlike *In principio*, the tone migrates among the voices, and is frequently stated by more than one voice. No single voice carries the tone throughout, although it is present in the tenor in all but a single phrase near the opening of the motet—'assumpsit Jesus discipulos suos secreto'—which is divided between superius and altus. The motet sets up a contrasting framework of imitation which corresponds to the cadential emphasis on C and A respectively—the gospel tone occurs at the fifth above in the outer sections and at the fifth below in the interior sections (see Example 7.17).

Repetition as formal device

As with *In principio*, varied repetition is used for closure. This device is so frequently used as to be characteristic of the motet; two examples are shown in Example

7.17b. Textual parallels are reflected in musical parallels; this is seen on the small scale with the phrases 'ad illudendum' / 'et flagelandum' / 'et crucifigendum' (see Example 7.18).

On a larger scale, repetition is used for the adjacent phrases 'et Filius hominis tradetur' / 'principibus sacerdotum et scribus'. Here, as in *In principio*, at the durational centre of the motet, the gospel tone is less prominent and the melodic material relies on concentrated use of the third. The sequential use of three thirds (bracketed in Example 7.19) leads to the stepwise rising third characteristic of the *Ut (C)* tonality, which is framed here by the reciting tone C.[11] And, like *In principio*, a *mi* paradigm also appears in cadential extension (see Example 7.20). The same pattern is involved in the single *mi* cadence of the motet at the third and final extension of the cadence on A for the text 'et condemnabunt eum morte' (see Example 7.21).[12]

Questions of Style and Attribution

In principio erat Verbum and *In illo tempore assumpsit Jesus* represent the same approach to setting gospel texts in a motet format—one which resonates with the gospel tone associated with the texts. The pervasive influence of the gospel tone in these works is suggestive for the study of 'chant-based tonality'. Both motets occupy roughly the same tonal space as defined by their overall ranges (*In principio*: B^{b}-f^{2}; *In illo tempore*: A-f^{2}), although different clef combinations are used (*In principio*: g2-c3-c3-f3; *In illo tempore*: g2-c3-c3-f4). The choice of *cantus mollis* for one setting and *cantus durus* for

---

[11]For several examples of third-based motives in this motet, see Novack (1970: 198, Example 4). The larger-scale stepwise third noted in Example 19 and its strategic placement were not observed by Novack.

[12]This cadence is not mentioned in other commentaries, but would certainly weaken classification of the work as Mode 5 on F.

the other coincides with the different placement of the gospel tone, but imitative techniques and the working out of a third-based motive lead to literal correspondences between the two works—most notably the use of the C-A third—as well as analogy by system.

The tradition of setting gospel texts increased as the sixteenth century progressed (Moser 1931; Lowinsky 1968:I,220), and of the gospel motets that I have examined from the first half of the century, *In principio* and *In illo tempore* are the most closely related in their tonal deployment of the gospel tone. The attribution of neither motet has been questioned in print and Noble (1984:38) describes *In principio* as a 'superb example of Josquin's late four-part style' which might serve as 'the touchstone' by which to evaluate the posthumously published psalms. However, neither on the basis of their sources nor in purely stylistic terms is the position of these motets in the Josquin *oeuvre* unimpeachable, and Rifkin's cautionary words about accepting attributions at face value (1991) may well be applied here. Like the early motet settings of psalm texts in motet format, these works became the basis of a German Protestant tradition. Like the psalm settings attributed to Josquin, this pair of motets appears to belong to the early part of that tradition and they share with several of the securely attributed psalms a common source: *VatS 38*. The earliest sources of *In principio* date from the first third of the century (*ModD 9* and *ToleF 23*) and liturgical or at least para-liturgical use of this gospel setting is implied in the arrangement of *ToleF 23* (Snow 1983:274). It seems clear from later German sources that settings like Josquin's were used as the Gospel in 'plenary' masses. In one such collection, *RISM 1545/5*, Balthasar Resinarus supplied three of the Gospel motets—on the same three texts for which settings are attributed to Josquin: *In*

principio, *Factum est autem*, and *Liber generationis*. Josquin's setting of *In principio* and one by Valentin Soir appear in a similar later Protestant collection, *RISM 1554/10*.[13]

In illo tempore is transmitted only in later sources: *BerlGS 7* (1537-43) [Bruck]; *ToleBC 13* (1553-4) [anonymous]; and *VatS38* (1563) [Josquin]. Only the bassus partbook of *BerlGS 7* (*olim GöttSA 7 olim KönSU 1740*) is extant, in which *In illo tempore* is transmitted anonymously. It is clear, however, that Moser's description ([1931:22] written before the other partbooks of this source were lost) of an *In illo tempore* which he attributes to Arnold von Bruck refers to this motet.

Indeed, the attribution to Arnold von Bruck is confirmed in Loge's dissertation on the manuscript (1931:44), although Loge gives priority to the Josquin attribution of *VatS 38*.[14] The source was no longer available to the editors of the *Werken* when *In illo tempore* appeared; neither was the (now-lost) Bruck attribution mentioned by Wessely (1980:III,351-52). Unlike *In principio* and the genealogies,[15] the text of *In illo tempore* was not part of a polyphonic tradition and was not a repeatedly set text.[16] At this time, its attribution must remain in question; its parallels with *In principio* and its gospel-tone

---

[13]In later (mostly German) settings of *In principio*, reference to the gospel tone is much less obvious although it is clearly incorporated in the tenor of Mathias Werrecore's 8-voice motet. I am grateful to Professor Harry Lincoln for providing incipits of several motets from his Motet Index, in progress.

[14]'Der römischen überlieferung dürfte der Königsberger der Vorzug zu geben sein, zumal die schöne Komposition über das wenig bearbeitete Evangelium am Sonntag Quinquagesim (neben dieser existieren Bearbeitungen von Ninot in Florenz, Maglib., Ortiz in Rom, Cap. Sist.; eine anonyme Komposition existiert in Breslau) inhaltlich sehr gut von Josquin Herrühren könnte.' (59, n26).

[15] For early polyphonic settings of these texts in chant notation, see Moser (1931) and Göllner (1969).

[16]Moser (1931:41) and Loge (1931:56) connect *In illo tempore* with a setting by Ninot le Petit (CMM87:17). Although both texts have the same incipit—the gospel introduction followed by 'assumpsit Jesus'—Ninot sets different verses from the same chapter of Matthew (Matthew 17:1-9). References to the reciting tone (C) appear infrequently, and only in the tenor, but with clarity for the opening phrase of text 'In illo tempore assumpsit Jesus.'

tonality place it early in the sixteenth-century tradition of setting gospel texts. While this does not argue definitively against Josquin's authorship, the possibility that the attribution to Arnold von Bruck is correct and that the motet is modeled on *In principio* deserves serious consideration.

* * *

The analyses presented in this chapter provide an interpretation of chant-based tonality. I have suggested that the motets described here share features of the *Ut* tonality, but they are not representatives of that tonality. Indeed, it is misleading to describe them as anything other than 'gospel-tone' tonality: a pre-determined and closed chant-based classification. These works belong in a group of their own; their tenor terminations on A and C are immediate indications that they are outside the normal scheme of finals. This combined with their cadential hierarchy and their freedom of movement between *ut* and *re* modal types by means of a *mi-fa* paradigm mark these works as exceptional if viewed only in the context of Josquin's other motets, but they may be recognized as conventional polyphonic gospel settings if viewed in light of the gospel tone.

CHAPTER 8

MOTETS FIRST ATTRIBUTED TO JOSQUIN IN LATE GERMAN SOURCES

This chapter provides a survey of tonal procedures in motets first attributed to Josquin in German sources from the mid-1530s and later, placing them in the context of the motets discussed in Chapters 4 to 6. Because of the likelihood of *opera dubia* among these works, I deemed it most prudent to discuss them in a separate chapter even though a style-based determination of authorship is not the primary function of this thesis. Several of the motets discussed in this chapter have been used as examples of Josquin's 'late' style in general anthologies and textbooks with little assessment of their attributions, the relationship of these motets to more securely attributed works, or the context in which these motets were written and performed: e.g., *Tu pauperum refugium* (*secunda pars* of *Magnus es tu, Domine*) in *HAM* and subsequently Salzer (1969), Berry (1976), and Joseph (1978); *Dominus regnavit* in Palisca (1988); *Caeli enarrant* in Crocker (1966); *Benedicite omnia opera* in Lowinsky (1962) and Williams (1975), etc. These motets all manifest elements of the 'Josquin style', but what they more precisely reflect is the German reception of Josquin in the early years of the Reformation. In many cases, the interdependence of the German motet prints suggests a single source as the basis of attribution to Josquin. With the exception of *Magnus es tu, Domine*, all of the motets are settings of psalms or other Old Testament texts, consistent with the prominence of these text-types in German sources. These motets range from works which suggest no stylistic reason to doubt the attribution to Josquin to those which appear to be modeled on

widely-circulated motets attributed to Josquin to those which are on stylistic grounds unlikely to be his compositions. Discussing these motets apart from the general discussion of *Ut / Re / Mi* tonality allows similarities of text type and tonal treatment among these motets to be highlighted and some general observations about their relationship (tonal and otherwise) to the securely attributed works to be offered.

The tonal distribution of these motets contrasts markedly to the motets discussed in Chapters 4 to 6, with only four *Re* motets, and seven each in the *Ut* and *Mi* tonalities.[1] A four-voice texture is the norm, although two of the psalm motets are for five voices.

Re motets

Table 8.1: *Re* motets attributed to Josquin in late German sources

Motet	Text	Sources
Levavi oculos	psalm + refrain	*1539/9*
Usquequo, Domine	psalm + refrain	*1538/6, 1553/6. HeilbS XCIII/3, DresSL 1/D/105*
Mirabilia testimonia	psalm	*1539/9, 1553/6*
Cantate Domino (5vv)	psalm + dox.	*1539/9* (anon.), *1553/4, 1553/5*

The *Re* psalm motets transmitted exclusively in German sources stand apart from the registral and cleffing norms of the motets discussed in Chapter 4 (see Example 4.1). *Cantate Domino* (*Werken* 72), first published anonymously in *RISM*

[1]The two psalm motets which appear anonymously in earlier non-German sources, *Laudate Pueri Dominum* and *Paratum cor meum*, are both *Ut* motets.

1539/9 and attributed to Josquin in *RISM 1553/4*, has long been questioned on stylistic grounds (e.g. Osthoff [1965:II,141]) and Finscher [1961]). Unlike the other psalms in the *Re(G)* tonality, it is for five voices; uniquely among the five- and six-voice motets attributed to Josquin, it has two voices in the superius range and makes no use of a cantus firmus or scaffolding device. Unlike the other *Re* motets from German sources, it does not employ obvious references to a presumably authentic motet in its thematic material, formal conventions (doxology or return of the opening text at the end), or textural procedures, nor is there a precedent for the wide-ranging cadential plan of the motet (with cadences to G, D, B^{b}, F, A, and C—see Appendix 3) and the formulaic use of S1, T, and B for cadences.[2]

Levavi oculos meos (*Werken* 70) was published in a single German print, *RISM 1539/9*, the same source in which *Cantate Domino* first appeared. Osthoff (1965:II) and Dahlhaus (1968/1990) noted its generic relationship to *Qui habitat in adjutorio*, but neither remarked on the exceptional clef (c2) and extraordinarily wide range (g-f^{2}) which distinguish the superius of this motet from the rest of the *Re(G)* motets. Dahlhaus provided the most detailed comparison of *Qui habitat* and *Levavi oculos meos* in a discussion of motets which end either on A in the natural system or D in the flat system (1968/1990:261).[3] He observed the following similarities: both motets repeat the opening imitations at the end; those imitations are extended on

---

[2]Osthoff (1965:II,141) suggested that the disposition of voices and use of texture argued for a composer from the Gombert-Willaert generation.

[3]Patrick Macey also recently completed a study on this pair of motets which independently corroborates my conclusions here, citing some of the same passages from the two motets. I am grateful to Professor Macey for a typescript of his forthcoming publication (Macey [1992]). Macey (1985, 1991, and 1992) has provided the most detailed picture to date of the context of Josquin's large psalm compositions, but many questions remain about the repertory transmitted in late German sources. Macey, like many others who have questioned the veracity of the Josquin attributions in these sources, proposes a 'Kleinmeister' as the likely composer of *Levavi oculos meos*, but details on the identity of such Kleinmeister are lacking and further research is needed on the compilation of the German psalm anthologies and the contexts of the performance of their contents.

repetition to cadences on D; and the *primae partes* end on 'half cadences'. Dahlhaus goes on to note the almost note-for note agreement of the ending of the two motets.

The musical parallels of the two motets go beyond generic formal correspondences, shared cadential hierarchies, and identical concluding sonorities. The nature of the relationship is illustrated in the opening point of imitation: the definitive first four notes and rhythmic pattern of the motive are shared. The time interval of the imitation is the same, but the order of voices is varied. Numerous other more general parallels of shared motivic material and imitative context are cited in Example 8.1.[4] These correspondences suggest a re-working in *Levavi oculos* of the most salient themes of *Qui habitat*. The most direct correspondences occur at 'framing points', i.e. the opening of the motets and the conclusion of the *prima* and *secunda partes*.

The most obvious difference between the two motets is the way imitation is used to focus on, or move away from, the *Re* tonal centre. *Qui habitat* employs literal imitation at the fifth, often in voice pairs, frequently in the pattern G-D // D-A, as described in Chapter 4, and there is a hint of the extension G-D-A-E. When the imitation is used in a closed tonal context, the necessary alterations (a 'tonal' answer) are not made systematically (see, for example, bs 192-5 in *Qui habitat*). The opposite is true in *Levavi oculos*, which uses true tonal answers and a bass line which Novack described as 'remarkably forward-looking' (1976:332). In light of the clef and range disparities noted above and the direct and indirect correspondences between the two motets detailed in Example 8.1, the 'forward-looking' details in *Levavi oculos* may differentiate a composition modeled on a securely attributed

[4]Boxed sections mark shared material which requires no further comment in this context. See the discussion of *Qui habitat* in Chapter 4.

Josquin motet (*Qui habitat*) which had appeared in a similar and widely-circulated German print just two years before the publication of *Levavi oculos.*

Usquequo, Domine, oblivisceris me (*Werken* 60) also stands apart from the securely attributed *Re* motets, not because of its cleffing or range, but rather for the two-flat signature of its altus.[5] The motet first appeared in *RISM 1538/6* along with several other psalm motets whose attributions to Josquin are now in question.[6] Noble (1984:38) apparently had doubts about the authorship of *Usquequo Domine*, even though he retained it in his list of 'authentic' works. Like *Memor esto*, *Qui habitat*, and *Levavi oculos*, the motet ends with a literal repetition of the opening half-verse; unlike those motets, it concludes on the final. The opening point of imitation does not place strong emphasis on the *re-la* fifth and these motets share no more than a general formal connection. Instead, the opening of *Usquequo, Domine* calls to mind the psalm motet *In exitu Israel* and the *Mi* motets with its *la-fa-la* (*=mi-fa-mi*) motive, although the cadential plan from A to G within paired voice repetition has no precedent in the securely attributed psalm motets.

There are several examples of recitation in the motet which appear to derive from psalm tones 1 and 8. A cadential plan is established in relation to the verse division of the two *partes* of the motet: G/G/D // G/G/D/G, but the cadential profile of the motet (see Appendix 3) suggests a less regular ordering, with internal cadences to A and C that result from moving between two tonal areas. Cadences to C in the second verse move to motivic material related to tone 8 which is imitated and repeated in the third verse (see Example 8.3). Motivic relationships in the *secunda*

---

[5]The only comparable signature configuration among the *Re* motets belongs to *O admirabile.* See the discussion in Chapter 4.

[6]*Beati quorum*, *Caeli ennarrant*, *Domine ne projicias me*, *Judica me*, and *Qui regis Israel.* Only *Judica me* has been assigned to another composer (Caen).

pars are all connected to thematic material from the first or third verse, as Example 8.4 illustrates. The conclusion of the *prima pars* uses a rising third motive in repetition as the basis of a rising sequence of thirds, leading to a registral high point and extensive repetition (see Example 8.5). Unlike the *Re* psalm motets discussed in Chapter 4, *Usquequo, Domine* lacks instances of statements of the modal type over verse groupings, although cadences to G generally employ the *re-fa* modal type. Similarly absent is the 'wrong-note' psalm endings of the *Re* psalm motets.[7] Far more notable in the tonal construction of the motet is the use of repetition and sequence combined with formulaic recitation.

The other *Re* psalm motet, *Mirabilia testimonia* (*Werken* 69), appeared in two anthologies (*RISM 1539/9* and *1553/6*) as the third motet in a sequence of settings from Psalm 119; the first two of which are *Memor esto verbi tui* (Josquin and Layolle) and *Bonitatem fecisti* (Carpentras and Heugel). The motet sets verses 129 to 144, divided equally between two *partes*. Melodic parallels between the beginnings and endings of the *partes* (see Example 8.6) and internal verse divisions are taken to the extreme in verses 142 and 143 of the *secunda pars* with literal repetition between first and second halves of verses (see Example 8.7). Repetition is also used across adjacent verses.

Sequential use of motives is an important feature of many of the imitative themes just cited as is the use of frequent repetition of small units in varying voice pairs. This motet makes no direct reference to a psalm tone or psalmody in its tonal

---

[7]The two-flat signature of *Usquequo* and prominence of cadences to C might suggest that this is actually a *Re(C)* motet in which the overall cadential plan (close of the *prima pars* on D and *secunda pars* on G) would be analogous to the *Re(G)* (endings on A and D) and *Re(D)* (endings on E and A) psalm motets, but the absence of *Re(C)* modal types makes this unlikely.

structure and instead of reference to a reciting note by individual voices, occasionally adopts simple homophonic declamation (see Example 8.8).

The securely attributed *Re* psalm motets form a cohesive group to which motets like *Levavi oculos* and *Usquequo Domine* clearly relate. Unlike these motets, *Mirabilia testimonia* appears to make no reference in any of its themes to the conventions of psalm tones, either through ending formulae or limited recitation in individual voices; it has a closed tonal ending and no material is added to the psalm text (e.g., antiphon, repeat of opening verse, refrain, doxology). The motet also displays a certain lack of contrapuntal competence;[8] equally telling is the absence of overall formal and tonal design on the scale of the other *Re* psalm motets. Beyond the parallels of the opening and ending of each *pars*, melodic parallels are restricted to adjacent verses, and usually to the two halves of a single verse. Two verses close on A; otherwise, cadences at the end of verses are all to D. There is no section of tonal contrast, little play between *re* and *mi*, and no use of a two or three-note motive in immediate and literal repetition, all characteristic features of the securely attributed *Re* psalm motets.

---

[8]For example, there are several instances of consecutive fifths and octaves: S/T bs 90.4-91.1; A/TB, bs 91.3-92.1; S/B b. 121.1-.2; B/T b. 121.2-.3; S/A b. 195.2-.4. Although some of these might be explained as printing errors, the majority result from literal imitation at the octave and simply represent poor contrapuntal planning of strict imitation. The non-imitative sections rely heavily on parallel motion in the outer voices (e.g. bs 21-8; 49-72; 123-7; 140-6; 255-7). The linear motion of individual voices creates dissonances without precedent in the securely attributed motets (e.g., bs 44, 97, 109, 122, 157, 160-1, 170, 173, 182).

Mi motets

Table 8.2: *Mi* motets attributed to Josquin in late German sources

Domine exaudi	psalm	*KasL 24, 1553/6*
Caeli enarrant	psalm	*KasL 24, 1538/6, 1553/4*
Jubilate Deo	psalm	*DresSL 1/D/6, DresSL 1/D/501, VienNB Mus. 15500* (anon.), *1539/9*
Domine ne projicias me	psalm compilation	*BerlPS 40031, HeilbS XCIII/3* (anon.), *1538/6, 1553/5*
Domine Dominus noster (5vv)	psalm	*DresSL Grimma.59.a, HalleU 1147, KasL 24* (anon.), *1553/4*
Responde mihi	Lection (Office of the Dead)	*LeidGA 1439* ('incertus auctor'), *1545/2*
Magnus es tu		*1504/1* (anon.), *RegB B.211-5* ('Josquin alii H.F'), *MunU 322-5, SGallS 463, VienNB Mus. 15500* (anon.), *1538/3* (Finck)

Unlike the *Mi* motets discussed in Chapter 6, the seven motets under consideration here uniformly conclude on E in the bassus. The four-voice psalms and *Magnus es tu, Domine* all employ a similar simple extension of E in the superius which is joined by the tenor on E and a bassus that moves from A to E; *Domine, Dominus noster* and *Responde mihi* by contrast conclude on E in the altus-bassus voice pair (see Example 8.9).

Four of the five psalm motets set complete texts while one (*Domine ne projicias me*) is a compilation. *Domine exaudi orationem meam* (*Werken* 92), a penitential psalm, and *Domine ne projicias me* (*Werken* 64) most closely accord with the textual and tonal associations suggested by the motets discussed in Chapter 6. Extended examples from *Domine ne projicias me* as an illustration of a *mi-fa* modal type were discussed in Chapter 3 (Example 3.15). The conclusion of *Domine, exaudi orationem meam* (the last half verse) uses a *mi-fa* modal type at a level comparable to the end of *Domine ne projicias me* with extension by means of a simple sequence

(see Example 8.10). *Caeli enarrant* employs an even simpler version of the same basic *mi-fa* modal type in its concluding verse (see Example 8.11).

The opening verse of each of these motets is based on a *mi-fa-mi* motive (with a slight elaboration in *Domine, exaudi*). Macey (1991) remarked on the similarities of the opening of *Caeli enarrant* and *Miserere mei Deus*,[9] and like *Miserere mei Deus*, it moves from *mi-mi* imitation to establish c^2 in the superius (see Example 8.12). *Domine, exaudi*, on the other hand, suggests the possibility of a *mi-mi* modal type; unlike any other motets in this tonality, its entire first verse lacks any true cadences (see the cadential profile in Appendix 3 and Example 8.13).

Melodic material derived from the *mi-fa-mi* melodic shape punctuates *Domine, exaudi*, as does sequential use of falling thirds. The most extended use of immediate, literal repetition comes at the mid-point of the motet, but unlike the examples cited previously, it relies on the alternation of voice pairs and is longer than the usual two- or three-note pattern (see Example 8.14). *Caeli enarrant* uses such literal repetition in individual voices, voice pairs, and the full texture. This repetition frequently relies on the stepwise rising third, but occurs in this motet more extensively than any other, and the placement is not obviously related to the dynamic or tonal shape of the motet as a whole.

Jubilate Deo (*Werken* 66) takes such repetition to an extreme in the final verse of its *prima pars*, as illustrated in Example 8.16. This motet offers the most

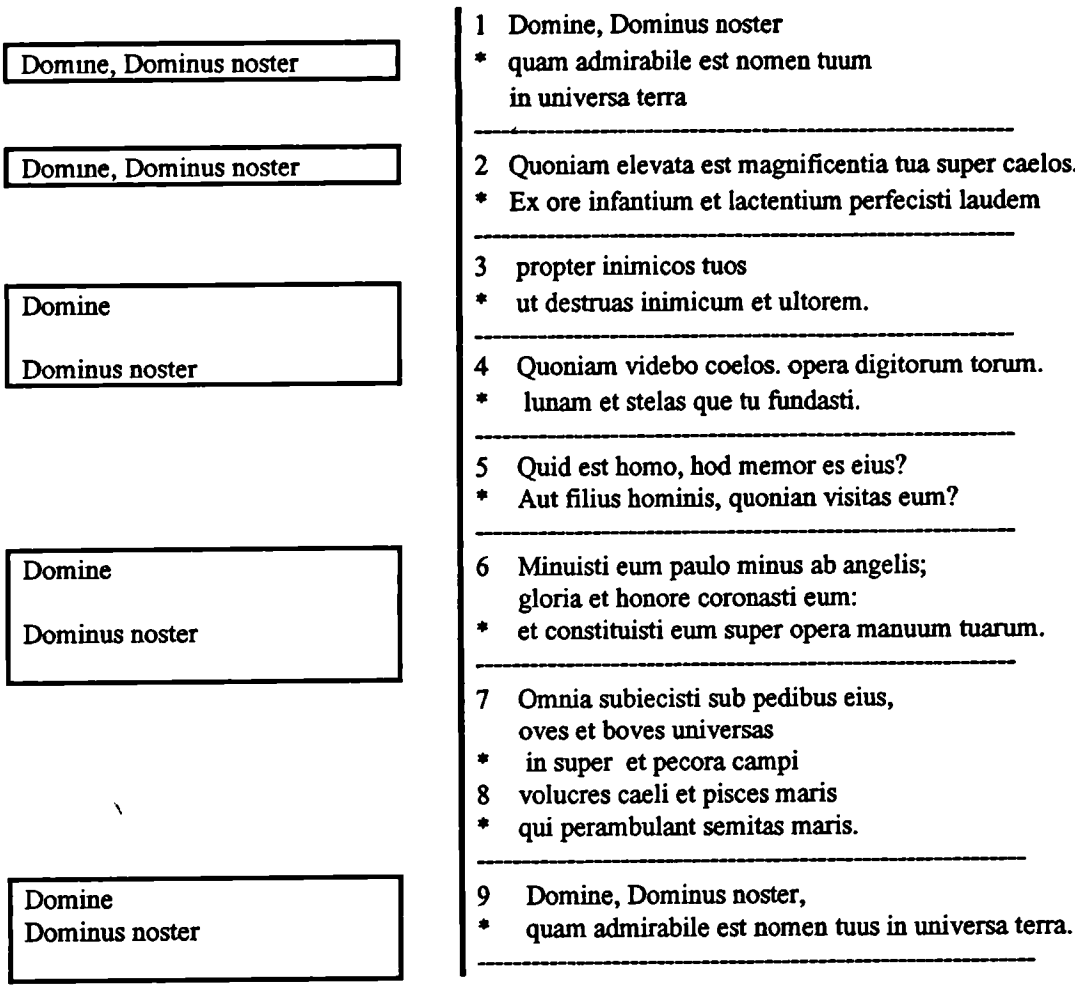
---

[9]Macey (1991) demonstrated the relationship between *Caeli enarrant* and three Josquin (or pseudo-Josquin) motets: *Miserere mei Deus*, *Ave caro Christi cara*, and *Fama malum*, and argued on the basis of contrapuntal infelicities that *Caeli enarrant* was the work of an apprentice composer modeled on motets by Josquin. A word of caution is in order, though. The underlying thesis which values originality and assumes that a composer of Josquin's stature does not repeat himself (nor for that matter is capable of contrapuntal errors) will not withstand close scrutiny. Indeed, Macey (1989) used similar stylistic evidence in quite a different way to argue for a closer connection of two works (*Ave Maria...benedicta tu* and the *Vultum tuum* cycle) on the basis of shared material. (See the discussion of these motets in Chapter 4.)

straightforward example of the motets discussed in this thesis of a *mi-fa* modal type across an entire motet (see the reduction in Example 8.17). The opening suggests a play of *re* and *mi* with *re-la/la-mi* and the cadence to D in b. 10, but even more than *Domine ne projicias me*, such play is at an entirely local level. After the opening duos, the texture is primarily non-imitative counterpoint. Noticeably absent is the *mi-fa-mi* motive and *mi-mi* imitative pattern so prevalent in the motets of this tonality.

The five-voice *Domine, Dominus noster* is built on an eight-note tenor ostinato (with the text *Domine, Dominus noster*) stated five times in increasing duration in the proportion 2:3:4:5:6. The ostinato divides into two parts, the parallel solmization of which (*la-sol-la-mi*) emphasizes the *la-mi* fourth (see Example 8.18). The last verse of the psalm is the same as the first, which may have suggested the tenor structure, although the textural repetition is not matched by musical repetition at the end of the motet.

Figure 8.1: *Domine, Dominus noster*, ostinato and text



Although the melodic structure of the ostinato is only directly incorporated in the opening imitation of the motet, the *mi-la* fourth and the modal type associated with it provide the basis of tonal coherence. As in *Miserere mei Deus*, d^2 serves as an upper neighbor to c^2, the *fa* of the *fa-mi* modal type and suggests resonances of psalm tone 3, as the reduction in Example 8.19 illustrates (see verse 2). Falling thirds are prominent, both as the basis of imitation and in repetitive contexts, as in verse 4 (bs 62-72); imitation is frequently extended across textual divisions with only a slight variation, as in verse 5 (bs 76-91); both are shown in Example 8.20. At the end of the motet extended imitation leads to a cadence on the final. This motet lacks the

final cadential extension on E in the superius-tenor pair found in the other psalm motets discussed here, in part because of the tenor structure. Voice crossing of superius and altus (bs 150-51),[10] in conjunction with the final point of imitation (bs 152-end; the opening notes move in fifths to the final: C→G→D→A→E) substitute the altus-bassus pair in the final cadence (see Example 8.21).

Responde mihi (*Werken* 75) is the only motet considered in this thesis which sets an Old Testament lection, its liturgical association is with the Office of the Dead (Job 13:22-8).[11] The opening of the motet recalls tonally the opening of the *prima* and *secunda partes* of another *Mi* motet, *Domine ne in furore* (see Example 8.22), and the cadential plans of the two motets also display similarities, particularly in the placement of cadential emphasis on C and G as secondary cadential areas. *Responde mihi* displays none of the dense motivic construction associated with *Domine ne in furore*, however. Nor does it incorporate the *mi-fa-mi* melodic patterns common to almost all *Mi* motets, although several points of imitation are derived from a simple variant of that pattern, akin to that employed in *Domine exaudi.* The imitation connected with this motive is always at the level of *mi-mi* and Example 8.23[12]

---

[10]*Miserere mei Deus* employs a similar voice crossing at the conclusion (see Examples 3.16 and 3.18).

[11]Osthoff (1965:II, 57) commented on the dependability of Salblinger's sources for *RISM 1545/2*. On Salblinger's editions, Sparks (1976:349n14) remarked that 'we owe a great debt to Salblinger for printing such magnificent works as 'Absalon fili mi' and 'Responde mihi', but we cannot fail to notice that his versions are marred by errors of the crudest sort'. Sparks questioned the authorship of three *Satzfehler* motets printed in *RISM 1545/2* and *1545/3*: *Nesciens Mater*, *Responsum acceperat Simeon*, and *Ave verum corpus*. Rifkin (1991) and van Benthem (1989) have challenged the authorship of *Absalon fili mi*, leaving *Responde mihi* as the only motet attributed to Josquin only in a Salblinger source. As Rifkin (1991:50n8) and Noble (1984) noted, *LeidGA 1439* bears the annotation 'incertus auctor'.

[12]The bar numbers in this Example follow the *Werken* for convenience although the bars of the *secunda pars* are misnumbered. This excerpt numbered bs 101-17 is taken from the opening of the *secunda pars*.

illustrates the gradual move away from the simple *mi-fa-mi* outlines in imitations which nevertheless continue to rely on a *mi-mi* framework.

Tonal coherence in *Responde mihi* appears secondary to the use of texture as a formal device to focus on the central recitation of the text 'Contra solium ventu rapitur', the most obvious reference in the motet to the lection tone. Figure 8.2 illustrates those textural procedures.

Figure 8.2: *Responde mihi*, texture

TB extended duo repeated SA	31	C
TB // SA (overlapped imitation in pairs)	39	D/F/A
TB // SA // TB incorporating local repetition	52	E
homophony	59	A
TB	65	A
recitation ATB then SATB	71	A
SA	84	E
TB to 4vv	91	G
TB // SA (overlapped imitation in pairs)	103	A
SA extended duo repeated TB	117	A
SA	121	E
homophony	126	G
TB extended duo repeated SA	141	E
4 vv	155	E

The final *Mi* motet considered in this chapter, *Magnus es tu, Domine*, serves as an interesting instance of the reception history of Josquin's motets. Glarean's attribution (and that of sources connected to Glarean: *MunU 322-5* and *SGallS 463*) and aesthetic evaluation of the motet appears to have held sway from Ambros through Osthoff. The publication of the *secunda pars* in *HAM* seems to have exerted a similar influence on American theorists, resulting in three extended analytical discussions of it: Salzer (1969); Berry (1976:45-7; 237-40); and Joseph (1978). Salzer and Schachter's graphic analysis may be relatively easily re-read from the perspective

of a *mi-fa* modal type, as the reduction aligned beneath the opening of their middleground analysis of the first half of the *secunda pars* suggests (see Example 8.24). More straightforward than the *mi-fa* types discussed in Chapter 6, this analysis illustrates again the extension of c^2 by means of descending *fa-re* (c^2-a^1) and *fa-ut* (c^2-g^1) patterns and an upper neighbour, d^2. Simple reiteration of the modal type underlies the basic tonal structure of the motet as a whole. The local tonal focus on C and A, characteristic of the *Mi* psalm motets discussed in Chapter 6, is noticeably lacking, and the use of repetition as a formal device as well as the subject matter of the text suggest *Qui velatus* as the more nearly related motet.

Ut Motets

Table 8.3: *Ut* motets attributed to Josquin in late German sources

Laudate, pueri, Dominum	psalm + dox. + refrain	*KasL 24, VerBC 760* (anon.), *1539/9* (anon.), *1553/5*
Paratum cor meum, Deus	psalm	*CorBC 95-6 / ParisBNN 1817* (anon.), *FlorBN Magl. 164-7* (anon.), *1539/7, J1555*
Dominus regnavit	psalm + dox.	*1539/9, 1553/5, LeipU 51*
In Domino confido	psalm	*KasL 24* (anon.), *1538/6, 1553/3, 1553/4*
Benedicite omnia opera	Old Testament canticle	*ZwiR 81/2, 1537/1, 1553/6, 1559/2*
Planxit autem David	Old Testament	*1504/1* (anon.), *FlorBN II.I.232* (attrib. Ninot in index), *Dres SL 1/D/505, Glarean, SGallS 463, VatS 38, J1535*
Stetit autem	Old Testament with add.	*LeipU 51, RegB 888, 1538/7*

The psalm motets of the *Ut* tonality make the most direct reference melodically and formally to psalmody of any of the psalm motets first attributed to Josquin in late German sources; two include a doxology and one (*Laudate pueri, Dominum*) concludes with a return of the opening half verse.

Laudate pueri, Dominum (*Werken* 68) incorporates tone 5 in the tenor, and hints of the tone return (primarily in the tenor and occasionally the superius) throughout the motet, although not as consistently as the gospel tone is used in *In principio erat Verbum.* The simple harmonization of the psalm tone is the same in the opening verse and conclusion of the doxology, suggesting a refrain form like that of the *Re* psalm motets. These are the only verses of the psalm which do not conclude on F, but the cadential extension of the opening half-verse brings the motet to a close on the final (see Example 8.25).

The cadences of interior verse endings are limited to F and C, with F more prominent (see the cadential profile in Appendix 3), and the harmonic materials of the motet are those set out in the harmonization of the first verse. The opening point of imitation outlines the *ut-mi-sol* initium of the psalm tone, a common melodic emphasis at the opening of *Ut* motets. The only departure from the constrained internal cadential plan occurs in verse 5, where the tone has been moved to the superius and is repeated a fifth lower in the tenor, resulting in cadences on A and D (see Example 8.26).

The opening bassus line F-C-F-B^{b}-F encapsulates the simple alternation in the motet of *ut-sol* and *ut-fa* melodies, a contrast which is emphasized in the imitation which opens verse 3 (see Example 8.27). The opening verses of the *secunda pars* also suggest such an alternation at the verse level of *ut-fa* and *ut-sol* modal types (see Example 8.28).[13]

Osthoff (1965:II,143-5) described the text-music relationship of this motet, noting particularly the pictorial devices associated with the text 'gloria ejus', 'qui in altis habitat et humilia respicit in caelo', 'suscitans a terra', and 'laetantem', and the syntactic relationship of words and music articulated by clearly marked pauses. In response to the anonymous transmission of the motet in its earliest sources, Osthoff concluded, 'welcher andere Komponist der ersten Hälfte des 16. Jahrhunderts hätte eine Motette von so überragender Qualität schreiben können?' (1965:II,145) Osthoff's view of the authorship and chronology of the 'late' motets rests on a circular argument that posits an increasingly sophisticated musical expression of the form and meaning of the text as represented by the psalm motets. As in the case of *Laudate,*

---

[13]The varied lengths of the opening notes of the point of imitation which begins this *pars* are reminiscent of the imitative technique which opens *Descendi in ortum meum.*

pueri, Dominum the recognition of such features simultaneously defines the late style and confirms the attribution of the motet to Josquin.

There are no securely attributed *Ut* psalm motets with which to compare *Laudate, pueri, Dominum*, but all of the *Ut(F)* motets on texts associated with a reciting tone (*Laudate, pueri, Dominum*; *Dominus regnavit*; and the canticle *Benedicite omnia opera*) reflect the origins of the works in psalmody. Like *Laudate, pueri, Dominum*, *Dominus regnavit*[14] suggests a play between *ut-fa* and *ut-sol* modal types, in a simple verse by verse varied repetition (see the distributional analysis and discussion of the motet in Example 3.13). *Benedicite omnia opera*, which shares the voice distribution of *Laudate, pueri, Dominum* (see Example 5.1) employs a similar repetition scheme of the *ut-sol* modal type at the level of alternate verses, illustrated in Example 8.29. In each of these motets, the tonal framework replicates the text structure and relies on transformations of the modal type either in alternate verses or in a verse-by-verse pattern. The cadential plans of the motets are remarkably consistent in the conclusions of verse endings to the final, F, and secondary cadences to C, which is taken to its extreme in *Dominus regnavit* (see the cadential profiles of these motets in Appendix 3.) Like the majority of the *Ut* motets discussed in Chapter 5, these motets are confined to relatively simple harmonic means, limited cadential areas, and sectionalized elaboration of the modal type.

Neither of the other two psalm settings in the *Ut* tonality, *Paratum cor meum* (*Ut(G)*) and *In Domino confido* (*Ut(C)*), includes the doxology nor overt reference to psalmody or the refrain pattern of other psalm motets. Like the others, however,

---

[14]Like *Responde mihi*, the entire opening verse is repeated by voice pairs in *Dominus regnavit*. In its extended canonic imitation and the resulting paired signatures (two flats in altus and bassus), as well as vocal distribution, *Dominus regnavit* stands outside the general conventions of the motets of the *Ut* tonality.

verse endings in *Paratum cor meum* and *In Domino confido* occur on the final, and both motets present a limited cadential profile. Verse endings to pitches other than the final in both motets are syntactically related to sentences ending with a question mark and are a direct musical equivalent. The tonal organization of *In Domino confido* (*Werken* 73) reflects the verse structure of the psalm, but repetition of the modal type at the level of verse is more varied than in the *Ut* psalms on other finals. The basic *Ut(C):ut-mi* type is used in two parts (as was the model for *Benedicite omnia opera*) corresponding to the division of the psalm verse (see Example 8.30). The simple textural structure of the motet relies on repetition by voice pairs and occasional recitation by one or more voices (e.g. bs 35-7 S; bs 43-6 SATB; bs 111-16 SATB), but with no obvious reference to a psalm tone formula. As the partial reduction in Example 8.31 illustrates, the registral high point of the superius (g^2) is reserved for the center of the motet (the psalm is divided at its midpoint and the two *partes* are of equal length) and bridges its two *partes*.

Osthoff pointed to the pictorial and rhetorical effects of *In Domine confido* (as he did with *Laudate, pueri, Dominum*) associated with the texts 'sagittent in obscuro rectos corde', 'pluet', and 'ignis, sulphur' as evidence in favour of accepting the attribution to Josquin, notwithstanding the anonymous transmission in *KasL 24* and *RISM 1538/6*, the earliest sources of the motet, and its attribution only in mid-century sources. However, this motet represents an approach to setting a psalm text that is further removed from the chant associations of that text than any of the other psalm motets discussed thus far, and is unique with its final on C.

In contrast to the securely attributed *Ut(G)* motet *Benedicta es, Paratum cor meum* and *Stetit autem Salomon* suggest a strong association of the G final and an *ut-fa* modal type. C is clearly the secondary cadential area in *Paratum cor meum* (the

secunda pars ends on C in addition to other interior closures to C). The emphasis on C is supplemented with occasional cadences to E.

Like *Dominus regnavit, Stetit autem* (*Werken* 58) employs a vocal distribution which suggests four distinct vocal types based on superius-tenor and altus-bassus pairs.[15] The text of *Stetit autem* is a compilation, linking the lection (the *prima pars*) for the Office of the dedication of a church (as Mattfeld [1959:39] noted) and a response and antiphon (Osthoff [1965:II,113]). Unusually for such texts in Josquin's *oeuvre*, there appears to be no reference to plainchant; indeed, the formulaic tonal construction of the motet as a whole, illustrated by the reduction of the *prima pars* in Example 8.32, argues against the likelihood of paraphrased chant melodies. The *fa* of the *ut-fa* modal type (labeled b on the reduction) is extended in two ways: the use of a descending *sol-ut* fifth (labeled a on the reduction), and by a falling *sol-mi* third suggestive of the full close of a reciting tone (labeled c on the reduction). The grouping of these simple patterns suggests the formal structure indicated on the reduction by brackets and upper-case letters.

Planxit autem David (*Werken* 20)[16] is the longest of the *Ut* motets and introduces the greatest variety of cadential material within a nevertheless limited cadence plan. More so than almost any other motet, the superius-tenor-bassus cadential framework is associated with cadences to the final at major textual

---

[15]That vocal distribution combined with the near-excessive repetition of the *ut-fa* modal type in both motets as well a strong suggestion of Mode 8 as seen in later polyphonic compositions may well argue against the attribution to Josquin of both motets.

[16]Although the index of *FlorBN II.I.232* ascribes the motet to Ninot, to my knowledge its attribution to Josquin has not been questioned. Ambros may well have been the first to draw attention to the parallels between the opening of this motet and the *Stabat mater*, and a concomitant chronological hypothesis which argues that *Planxit autem David* is the later of the two motets based on its expressive intensity. Another interpretation is that *Planxit autem David* may be a composition modeled on Josquin which takes the opening of one of his most widely-disseminated motets, *Stabat mater*, as its starting point.

subdivisions (see the cadential profile in Appendix 3). Osthoff (1965:II,105-8) and other have remarked on the three clear statements of the lamentation tone in the superius (bs 55ff, 257ff, and 314ff). Although these are the most prominent statements of the lamentation tone, it also permeates the melodic material of the motet, suggesting the *ut-mi* modal type and the work's strong cadential emphasis on A. The opening of the motet recalls the *Stabat mater*, but the extension moves to an *ut-mi* modal type (see Example 8.33). The large-scale form of the motet is punctuated by the interaction of structural cadences to F, extended chordal passages, augmented statements of the lamentation tone and repetition of simple imitative patterns.

In scope, text type, and tonal organization *Planxit autem David* is quite unlike the rest of the *Ut* motets, in spite of the relationship of the opening of the motet with *Stabat mater*. Like *Magnus es tu, Domine*, it first appears anonymously in *RISM 1504/1* and its attribution to Ninot in the index of *FlorBN II.I.232* may deserve further consideration. Like *Magnus es tu, Domine*, Glarean's appraisal of the motet, especially its expressive qualities, seem to have assured its position in the Josquin *oeuvre* (1547/1968:II,269-70).

* * *

The speculations on attribution included in this chapter are necessarily preliminary. The psalm settings emphasize closed tonal forms more strongly than the psalm settings discussed in Chapters 4 and 6: verse endings and the conclusion of the motet are almost uniformly to the final. The relationship of the motets to psalmody is at once more direct and yet more removed. The conventions suggested by the *Re* psalm motets discussed in Chapter 4 are reflected only *Levavi oculos meos*, which

seems most likely to have been modeled directly on *Qui habitat.* The *Mi* psalms discussed in this chapter are more 'matter-of-fact' settings than those motets discussed in Chapter 6, both musically and textually. *Domine ne projicias me* (a compilation) and *Domine exaudi* (a penitential psalm) accord most nearly with the 'special' texts associated with the securely attributed *Mi* psalm motets. The *Ut* psalm motet *Laudate, pueri, Dominum* compares most directly in its use of a reciting tone to the gospel motet *In principio erat Verbum*, although the structural influence of the tone is less apparent in *Laudate, pueri, Dominum.* The majority of the motets discussed in this chapter rely on simple reiteration of the modal type at a local level reflecting the verse structure of the text, as exemplified by *Dominus regnavit.* Evaluation of the attribution of these *Mi* and *Ut* motets must ultimately wait for a broader study of the of psalm motets in German prints from the 1530s, alongside an evaluation of the 'German' Josquin and the roles Glarean, Ott, and others played in creating him.

SUMMARY AND CONCLUSIONS

The research presented in this thesis represents the first step in a much larger project. The analytical approach I have put forward here attempts to move debate away from modal / tonal polemic, and focuses instead on a relatively narrow sample of works from a single genre attributed to one composer occupying a restricted chronological period. The genre (the motet), the composer (Josquin), and the date (*c.* 1500) have all been traditionally identified as significant in the 'emergence' of triadic tonality. The analyses presented here reshape that view.

All the evidence suggests that the motet be understood as a para-liturgical genre, and its musical relationship to liturgical monophony is similar to its functional associations, ranging from 'chant-based' tonality to motets in which only a resonance of a chant type is perceptible. It is worth stressing that the compositional techniques of pervasive imitation and structural repetition have not supplanted the reliance on pre-compositional entities in Josquin's motets—which range from simple paraphrased chant melodies, to borrowed secular melodies, to mensuration tenors, to ostinati, or to some combination of these. The study of these motets from the perspective of *Ut/Re/Mi* tonality reveals generic associations of tonality and text type. The *Ut* and *Re* motets rely almost entirely on chant models, and it would not be surprising to discover that the few 'freely' composed motets in these tonalities, motets like *Ecce tu pulchra es*, are based on previously unknown chant models.

The thirty-two *Re* motets, the largest group, are primarily Marian motets but also include all of the elevation motets. Antiphons are the most common text type in

the *Re* tonality and both Mode 1 and Mode 2 chants are set most frequently with a G final and B-flat signature, with three voice-types in the range G - d^2. *Re(D)* motets are uncommon, and in the case of at least two of the motets discussed here the choice of a D final reflects associations with earlier settings of the same text by other composers. The few (four) securely attributed psalms in the *Re* tonality adopt a compositional strategy that directly reflects their reciting tone origins, just as the Marian motets rely on chant melodies. Characteristic of the psalm motets is a play of tonal focus between *re* and *mi*—a play which is implicit in the two reciting tones of the *tonus peregrinus* on which *In exitu Israel* is based.

The securely attributed *Ut* motets are also primarily Marian in orientation. Sequence texts appear most frequently, antiphons secondarily. The motets which incorporate a sequence-like poetic text are equally divided among settings for four or fewer voices (*Ave verum corpus, Ave Maria...virgo serena, Mittit ad virginem*) and those for five or more voices: (*Inviolata, integra et casta es, Maria; Stabat mater;* and *Benedicta es*). Further exploration of the sequence texts may yield evidence of connection with the *lauda* repertory; melodic, textural, and mensural treatment in *Ave Maria, Mittit ad virginem,* and *Stabat mater* suggest that these motets in particular deserve further exploration from this perspective. Repetition, a characteristic of the sequence chants on which these motets are based, is also a notable feature of two of the motets which set antiphon texts: *Regina Caeli* and *Descendi in ortum meum.* In keeping with the extensive use of repetition, modal types occur primarily at the level of verse in this tonality; modal types at the level of *pars* or entire motet are relatively infrequent. Similarly, the tonal materials of the *Ut* tonality are the most 'restricted' of any of the tonalities. The securely attributed *Ut* motets all rely on chant. These include works based on Mode 5, 6, 7, and 8 chants (Mode 6 chants are most common); but like the *Re* motets no polyphonic modal distinction is apparent, and the

primary modal types—*Ut:ut-sol*, *Ut:ut-mi*, and *Ut: ut-fa*—occur with no specific association of final or mode, although G finals are rare.

The securely-attributed *Mi* motets, in contrast to those of the other two tonalities, are primarily settings of 'special' psalm texts—compilations like *Misericordias Domini*, penitential psalms, etc.—and Christological texts. The play between *re* and *mi* seen in the *Re* psalm motets is taken further here and tonal ambiguity characterizes these motets. Both of the primary modal types associated with this tonality, *Mi:mi-fa* and *Mi:mi-la*, result in a strong harmonic emphasis on the fourth and sixth above the final and a directly proportional lesser emphasis on the final and confinal. Cadential support a fifth below the final is common, contributing to the distinctive tonal character of these motets. Reference to psalmody or a plainchant model is generally less overt in these motets, suggesting a resonance of the original chant type in the motivic and cadential emphases.

The two genealogies in the *Mi* tonality relate directly to their plainchant models, Mode 3 melodies. Every level of the tonal structure of the other two settings of gospel texts discussed in this thesis—*In principio erat Verbum* and *In illo tempore assumpsit Jesus*—reflect the gospel tone on which the motets are based. Although many aspects of the tonal structure of this pair of motets are similar to other *Ut(F)* motets, their tonal structure is best described as chant-based tonality. Indeed, throughout this study the themes highlighted in Chapter 7 on the Gospel motets recur: the extensive reliance on a pre-compositional device; the primacy of repetition as a formal and structural device; use of texture for formal means; and the melodic and harmonic conventions associated with a vocal range that relies on three basic voice types: superius, altus/tenor, and bassus.

Vocal distribution in relation to final and signature became a means of representing plagal and authentic modes in polyphony (that is, Mode 1 with D final;

Mode 2 with G final and B^{b}; Mode 5 with F final and B^{b}; Mode 6 with C final, etc.) for following generations of composers, but musical evidence of such a distinction among the motets studied here is lacking. Modal representation in polyphony by tonal type—that is by final, cleffing, and signature—suggests conventions about voice relationships that can not be readily applied to Josquin's motets. The primary finals for the three tonalities I have described, *Re(G)*, *Ut(F)*, and *Mi(E)*, define a range of two and a half to three octaves in which the final is the lowest note of the bassus range, to which the G final in particular is suited; this may be reflected by the uniformity of ranges of the *Re(G)* and *Ut(G)* motets: G-d^{2}, the boundaries of the standard f4-c1 clef configuration. The tonal space around the secondary finals for the *Re*, *Ut*, and *Mi* tonalities (D, C, and A respectively) is defined differently and it is not surprising that there are fewer motets which use these finals, that those motets which do are apparently based on chant models or other pre-existing models which use those finals, and that tonal conventions associated with these finals are less clearly defined.

The distinction between three and four voice types is especially noticeable in the motets attributed to Josquin only in late German sources (where four voice types in pairs representing plagal and authentic ranges are far more prevalent). Particularly noticeable among these motets is a tendency toward closed tonal forms and limited cadential profiles. Among these motets, those which have received the most extended discussion previously are those which suggest Josquin's crucial role in an evolutionary tonal progression: e.g., *Benedicite omnia opera* and *Dominus regnavit.* It remains to be seen whether the features of voice types and cadential regularity which single out these motets in tonal terms (as well as the signature configuration and extensive canonic imitation of *Dominus regnavit*) indeed represent a 'culmination' of Josquin's motet style. If so, it is a culmination which is difficult to

reconcile with such securely attributed and presumably earlier psalm motets as *Memor esto verbi tui* and *Miserere mei Deus*, or even the more direct chant-based tonality of *In principio erat Verbum*, which has an analogy in the anonymously transmitted and later attributed psalm motet *Laudate, pueri, Dominum*. Conclusions about the authorship of the motets attributed to Josquin in German sources must await further study of the genre and the composers and editors who compiled the German anthologies in which the motets are transmitted.

The tendency to discard 'inferior' works from the Josquin *oeuvre* as 'unworthy of the master' is questionable. While Chapters 4 to 6 suggest some of the conventions of Josquin's style, only a broad study of motets by his contemporaries will clarify the extent to which those conventions are idiosyncratic as opposed to generic. In that sense, this thesis opens several avenues for further research. A number of questions must remain unanswered at this stage about *Ut/Re/Mi* tonality: whether the same tonal conventions hold true across the generic boundaries of motet, mass, and chanson, and what relationship, if any, exists between tonal preferences and geographic considerations. Several times in this thesis the reception history of Josquin's motets has also been raised. If, as I and others have suggested, works in German prints were the compositions of *Kleinmeister* modeled on other motets attributed to Josquin, what aspects of Josquin's style did they consider essential?

* * *

The theoretical framework of *Ut/Re/Mi* tonality and its analytical expression in 'modal types' provide a critical vocabulary with which to pursue the study of tonal coherence in polyphony *c.* 1500; this analysis of motets attributed to Josquin can thus

serve as a model for the musical evaluation of this repertory. Contextual, contemporary theoretical, and structural perspectives cannot be arbitrarily separated, but rather must be considered together in order to provide the richest view of this challenging music.

BIBLIOGRAPHY

Manuscripts

Sigla follow *Census-Catalogue of Manuscript Sources of Polyphonic Music 1400-1550.*

BarcBC 454 Barcelona. Biblioteca Central. MS 454.

BerlGS 7 [olim GöttSA 7, olim KönSU 1740] Berlin. Geheimes Staatsarchiv Preussischer Kulturbesitz. MS XX. HA StUB Königsberg Nr. 7.

BerlPS 40031 Kraków. Biblioteka Jagiellońska. Formerly Berlin. Staatsbibliothek. MS Mus. 40031.

BerlS 40021 Berlin. Staatsbibliothek Preussischer Kulturbesitz. MS Mus. 40021.

BolC Q18 Bologna. Civico Museo Bibliografico Musicale. MS Q18.

BolC Q20 Bologna. Civico Museo Bibliografico Musicale. MS Q20.

BolC R42 Bologna. Civico Museo Bibliografico Musicale. MS R142.

BolSP 29 Bologna. Archivio Musicale della Fabbriceria di San Petronio. MS A.XXIX (*olim* L).

BrusBR 9126 Brussels. Bibliothèque Royale. MS 9126.

CambraiBM 125-8 Cambrai. Bibliothèque Municipale. MSS 125-128 (*olim* 124)

CambriP 1760 Cambridge. Magdalene College, Pepys Library. MS 1760.

CopKB 1872 Copenhagen. Det Kongelige Bibliotek. MS Gamle kongelige Samling 1872, 4°.

CorBC 95-6 Cortona. Biblioteca Comunale. MSS 95-96.

DresSL 1/D/3 Dresden. Sächsische Landesbibliothek. MS Mus. 1/D/3 (*olim* B. 1270).

DresSL 1/D/6 Dresden. Sächsische Landesbibliothek. MS Mus. 1/D/6 (*olim* Oels 529).

DresSL 1/D/501 Dresden. Sächsische Landesbibliothek. MS Mus. 1/D/501.

DresSL Grimma.59a Dresden. Sächsische Landesbibliothek. MS Grimma 59a.

ErlU 473/4 Erlangen. Universitätsbibliothek. MS 473/4 (*olim* 793).

FlorBN II.I.232 Florence. Biblioteca Nazionale Centrale. MS II.I.232 (*olim* Magliabechi XIX.58).

FlorBN Magl.107bis Florence. Biblioteca Nazionale Centrale. MS Magliabechi XIX.107bis.

FlorBN Magl.164-7 Florence. Biblioteca Nazional Centrale. MS Magliabechi XIX. 164-167.

FlorL 666 Florence. Biblioteca Medicae-Laurenziana. MS Acquisti e doni 666 ('Medici Codex').

HalleU 1147 Halle an der Saale. Universitätsbibliothek. MS Ed. 1147.

HeilbS XCIII/3 Heilbronn. Stadtarchiv Musiksammlung. MSS XCIII/3.

HradKM 21 Hradec Králové. Krajske Muzeum, Literární Archiv. MS II A 21 (*olim* 8707).

KasL 24 Kassel. Murhard'sche Bibliothek der Stadt Kassel und Landesbibliothek. MSS 4° Mus. 24/1-4.

LeidGA 1439 Leiden. Gemeentearchief. Archieven van de Kerken. MS 1439 (*olim* B; 423; 761; 862; 1004).

LeidGA 1442 Leiden. Gemeentearchief. Archieven van de Kerken. MS 1442 (*olim* E; 426; 764; 865; 1007).

LeidSM 1440 Leiden. Stedelijk Museum in de Lakenhal. MS 1440 (*olim* C; 424; 762; 863; 1005).

LeipU 51 Leipzig. Universitätsbibliothek. MS Thomaskirche 51 (olim III, A. 22-23).

LonBLR 8.G.vii London. British Library, Reference Division. Department of Manuscripts. MS Royal 8 G. vii.

LonBL 19583 London. British Library, Reference Division. Department of Manuscripts. MS Additional 19583.

LonRC 1070 London. Royal College of Music. MS 1070 (*olim* Sacred Harmonic Society S.H. 1721).

MilD 3 Milan. Archivio della Veneranda Fabbrica del Duomo, Sezione Musicale. Librone 3 (*olim* 2267).

MilD 4 Milan. Archivio della Veneranda Fabbrica del Duomo, Seqione Musicale. Librone 4 (*olim* 2266). Facsimile edition, *Liber capelle ecclesie maioris: Quarto codice di Gaffurio*, ed. Angelo Ciceri and LUciano MIgliavacca, Archivium musices metropolitanum mediolanense 16 (Milan, 1968).

ModD 9 Modena. Archivio Capitolare del Duomo. MS IX.

ModE F.2.29 Modena. Biblioteca Estense e Universitaria. MS α.F.2.29 (Lat. 1232).

MunBS 10 Munich. Bayerische Staatsbibliothek, Musiksammlung. Musica MS 10 (*olim* H.C. 33; = MaiM 89).

MunBS 19 Munich. Bayerische Staatsbibliothek, Musiksammlung. Musica MS 19 (*olim* H.C. 27; = MaiM 43).

MunBS 41 Munich. Bayerische Staatsbibliothek, Musiksammlung. Musica MS 41 (*olim* H.C. 58; = MaiM 127).

MunBS 3154 Munich. Bayerische Staatsbibliothek, Musiksammlung. Musica MS 3154 (=MaiM 42) ('Chorbuch des Nikolaus Leopold').

MunU 322-5 Munich. Universitätsbibliothek der Ludwig-Maximilians-Universität. MSS 8° 322-325 (*olim* Cim. 44a).

MunU 327 Munich. Universitätsbibliothek der Ludwig-Maximilians-Universität. MS 8° 327 (*olim* Cim. 44b).

MunU 401 Munich. Universitätsbibliothek der Ludwig-Maximilians-Universität. MS 4° Art. 401 (1-4) (*olim* Cim. 44i).

PadBC A17 Padua. Biblioteca Capitolare. MS A 17.

ParisBNC 41 Paris. Bibliothèque Nationale, Département de la Musique. Fonds du Conservatoire. Rés. F. 41.

ParisBNN 1817 Paris. Bibliothèque Nationale, Département des Manuscrits. Nouvelles Acquisitions Françaises. MS 1817.

ParisBNN 4599 Paris. Bibliothèque Nationale, Département des Manuscrits. Nouvelles Acquisitions Françaises. MS 4599.

RegB B.211-5 Regensburg. Bischöfliche Zentralbibliothek. MS B. 211-215.

RegB C120 Regensburg. Bischöfliche Zentralbibliothek. MS C 120 (*olim* D XII) ('Pernner Codex').

RegB 893 Regensburg. Bischöfliche Zentralbibliothek. MS A.R.893.

RosU 71/1 Rostock. Bibliothek der Wilhelm-Pieck-Universität. MS Mus. Saec. XVI-71/1 (1-4).

SGallS 463 Saint Gall. Stiftsbibliothek. MS 463 ('Tschudi Liederbuch').

SegC s.s Segovia. Archivo Capitular de la Catedral. MS s.s.

ToleBC 13 Toledo. Biblioteca Capitular de la Catedral Metropolitana. MS B.13.

ToleBC 21 Toledo. Biblioteca Capitular de la Catedral Metropolitana. MS B.21.

ToleF 23 Toledo. Catedral, Obra y Fabrica. MS Reservado 23.

UlmS 237 Ulm. Münster Bibliothek, Von Schermar'sche Familienstiftung. MS 237 (a-d).

UppsU 76c Uppsala. Universitetsbiblioteket. MS Vokalmusik i Handskrift 76c.

VatC 234 Vatican City. Biblioteca Apostolica Vaticana. MS Chigi C VIII 234 ('Chigi Codex').

VatP 1976-9 Vatican City. Biblioteca Apostolica Vaticana. MSS Palatini Latini 1976-1979.

VatS 15 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 15.

VatS 16 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 16.

VatS 26 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 26.

VatS 38 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 38.

VatS 42 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 42.

VatS 45 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 45.

VatS 46 Vatican City. Biblioteca Apostolica Vaticana. MS Cappella Sistina 46.

VerBC 760 Verona. Biblioteca Capitolare. MS DCCLX.

VienNB Mus.15941 Vienna. Österreichische Nationalbibliothek, Musiksammlung. MS Mus. 15941 (*olim* A.N.35.H.18).

VienNB Mus. 15500 Vienna. Österreichische Nationalbibliothek, Musiksammlung. MS Mus. 15500.

ZwiR 81/2 (Voll. 16) Zwickau. Ratsschulbibliothek. MS LXXXI,2.

Sixteenth-Century Music Prints

Sigla follow RISM *Einzeldrucke vor 1800* and *Recueils imprimés, XVIe-XVIIe siècles.*

1501 *Harmonice musices odhecaton A* (Venezia: O. Petrucci), ed. Helen Hewitt (New York: Da Capo Press, 1978).

1502/1 *Motetti A numero trentatre A* (Venezia: O. Petrucci). [For edition, see Drake, *First Printed Books.*]

1502/2 *Canti B. numero cinquanta B* (Venezia: O. Petrucci), ed. Helen Hewitt, intro. Edward Lowinsky, Monuments of Renaissance Music 2 (Chicago and London: University of Chicago Press, 1967).

1503/1 *Motetti De passione De cruce De beata virgine et huius modi.*B (Venezia: O. Petrucci). [For edition, see Drake, *First Printed Books.*]

1504/1 *Motetti C* (Venezia: O. Petrucci).

J1505 *Missarum Josquin liber secundus* (Venezia: O. Petrucci).

1505/1 *Fragmenta missarum* (Venezia: O. Petrucci).

1505/2 *Motetti libro quarto* (Venezia: O. Petrucci).

1508/1 *Motetti a cinque libro primo* (Venezia: O Petrucci).

1514/1 *Motetti de la corona. Libro primo* (Venezia: O. Petrucci).

1519/2 *Motetti de la corona. Libro tertio.* (Venezia: O. Petrucci).

1519/3 *Motetti de la corona. Libro quarto.* (Venezia: O. Petrucci).

1520/1 *Motetti novi libro secondo.* (Venezia: A. Antico).

1520/3 *Motetti novi e chanzoni franciose a quatro supra doi.* (Venezia: A. Antico).

1520/4 *Liber selectarum cantionum quas vulgo Mutetas appellant sex quinque et quatuor vocem.* (Augsburg: Grimm & Wyrsung).

1521/3 *Motetti libro primo.* (Venezia: A. Antico).

1521/5 *Motetti libro quarto.* (Venezia: A. Antico).

[1521]/4 *Motetti libro secondo.* (Venezia: A. Antico).

[1521]/7 *Motetti et carmina gallica.* (Roma: A. Antico?).

1537/1 *Novum et insigne opus musicum, sex, quinque, et quatuor vocum*, ed. J. Ott (Nürnberg: H. Grapheus).

1538/3 *Secundus tomus novi operis musici, sex, quinque et quatuor vocum*, ed. J. Ott (Nürnberg: H. Grapheus).

1538/6 *Tomus primus psalmorum selectorum praestantissimis musicis in harmonias quatuor aut quinque vocum redactorum.* (Nürnberg: J. Petreius).

1538/7 *Modulationes aliquot quatuor vocum selectissimae, quas vulgo modetas vocant, a praestantiss. musicis compositae, iam primum typis excusae.* (Nürnberg: J. Petreius).

1539/9 *Tomus secundus psalmorum selectorum quatuor et quinque vocum* (Nürnberg: J. Petreius).

1545/2 *Concentus octo, sex, quinque & quatuor vocum.* (Augsburg: P. Ulhard).

1545/5 *Officorum (ut vocant) de nativitate, Circumcisione, Epiphania Domini et Purificatione*

1553/4 *Psalmorum selectorum a praestantissimis huius nostri temporis in arte musica artificibus in harmonias quatuor, quinque et sex vocum redactorum. Tomus primus.* (Nürnberg: J. Montanus & U. Neuber).

1553/5 *Tomus secundus Psalmorum selectorum, quatuor et plurium vocum.* (Nürnberg: J. Montanus & U. Neuber).

1553/6 *Tomus tertius Psalmorum selectorum, quatuor et plurium vocum.* (Nürnberg: J. Montanus & U. Neuber).

1554/10 *Evangelia dominicorum et festorum dierum musicis numeris pulcherrim comprehensa & ornata. Tomi primi continentis Historias & doctrinam, quae solent in Ecclesia proponi. De Nativitate. De Epiphaniis. De Resurrectione Jesu Christi* (Nürnberg: J. Montanus & U. Neuber).

J1555 *Josquini Pratensis, musici praestantissimi, moduli, ex sacris literis dilecti, et in 4, 5, et 6 vocis distincti. Liber primus.* (Paris: A. Le Roy, R. Ballard).

1558/4 *Novum et insigne opus musicum, sex, quinque, et quatuor vocum, cuius in Germania hactenus nihil simile usquam est editum. Nunc quidem locupletatum plus centum non minus elegantibus carminibus, tum Josquini, tum aliorum clarissimorum symphonistarum tam veterum quam recentiorum, quorum quaedam antehac sunt edita, mulat nunc primum in lucem exeunt.* (Nürnberg: J. von Berg & U. Neuber).

1559/1 *Secunda pars magni operis musici continens clarissimorum symphonistarum tam veterum quam recentiorum.* (Nürnberg: J. von Berg & U. Neuber).

1559/2 *Tertia pars magni operis musici.* (Nürnberg: J. Montanus & U. Neuber).

Theory Treatises

Aron, Pietro, 1516: *Libri Tres de Institutione Harmonica* (Bologna, facsimile, ed. Giuseppe Vecchi, Bologna: Forni Editore, 1970).

_____, 1523: *Toscanello in Musica* (Venice, facsimile, Broude Brothers, Monuments of Music and Music Literature in Facsimile 69), trans. Peter Bergquist (Colorado Springs: Colorado College Music Press, 1970), 3 vols.

_____, 1525: *Trattato della natura e cognizione di tutti gli tuoni di canto figurato* (Venice; facsimile, Utrecht: Musica Revindicata, 1966), trans. of chpts 1-7 in Oliver Strunk, Source Readings in Music History (New York: W.W. Norton, 1950), 205-18.

Burtius, Nicolaus, 1487: *Musices Opusculum*, trans. Clement A. Miller, MSD 37 (n.p.: American Institute of Musicology, 1983).

Cochlaeus, Johannes, 1511: *Tetrachordum Musices*, trans. Clement Miller, MSD 23 (n.p.: American Institute of Musicology, 1970).

Dressler, Gallus, 1563: *Praecepta musicae poeticae.*

Finck, Hermann, 1556: *Practica musica* (facs. Hildesheim, 1971).

Gaffurius, Franchinus, 1496: *Practica musicae*, trans. Irwin Young (Madison: University of Wisconsin Press, 1969); trans. Clement Miller, MSD 20 (n.p.: American Institute of Musicology, 1968).

_____, 1518: *De Harmonia Musicorum Instrumentorum Opus*, trans. Clement Miller, MSD 33 (n.p.: American Institute of Musicology, 1977).

Glarean, Heinrich, 1547: *Dodecachordon* (Basel, facsimile Broude Brothers, Monuments of Music and Music Literature 65, 1967); trans. Clement Miller, MSD 6 (American Institute of Musicology, 1965), 2 vols.

_____, 1516: *Isogoge in musicen*, trans. F.B. Turrell, JMT 3 (1959), 97-139.

Heyden, Sebald, 1540: *De arte canendi* (Nuremburg; facs. New York: Broude Brothers, 1969), trans. Clement A. Miller, MSD 26 (n.p.: American Institute of Musicology, 1972).

Tinctoris, Johannes, 1477: *Liber de arte contrapuncti*, ed. Albert Seay, Opera Theoretica, CSM 22; trans. idem, *The Art of Counterpoint*, MSD 5 (n.p.: American Institute of Musicology, 1961).

_____, 1476: *Liber de natura et proprietate tonorum*, ed. Albert Seay, *Opera Theoretica*, CSM 22; trans. idem, *Concerning the Nature and Propriety of Tones* (Colorado Springs: Colorado College Music Press, 2nd edn, 1976).

Music Editions

Antiphonale Pataviense (Vienna: 1519), facsimile ed. Karlheinz Schlager, *Das Erbe Deutscher Musik* 88 (Brenreiter: Kassel, 1985).

Brown, Howard, ed. *A Florentine Chansonnier from the time of Lorenzo the Magnificent*: Florence, Biblioteca Nazionale Centrale MS Banco Rari 229 (Chicago and London: University of Chicago Press, 1983), 2 vols.

Drake, George Warren James, 1972: 'The First Printed Books of Motets, Petrucci's *Motetti A Numero Trentatre A* (Venice, 1502) and *Motetti de Passione, de Cruce, de Sacramento, de Beata Virgine et Huiusmode B* (Venice, 1503): A Critical Study and Complete Edition' (Ph.D. dissertation, University of Illinois at Urbana-Champaign). [Critical edition in Volume 2.]

Dufay, G. *Opera omnia*, ed. G. de Van and H. Besseler, CMM.

Fevin, Antoine de. *Sancta trinitas*, ed. Stanley Boorman, Musical Times Supplement (March 1970).

Graduale Romanum (Tournai: Desclee, 1974).

Liber Usualis (Trounai: Desclee, 1952).

Lowinsky, Edward, ed. *The Medici Codex of 1518*, Monuments of Renaissance Music 4 (Chicago and London: University of Chicago Press, 1968).

Mouton, Jean. Motets, ed. Henry Expert, Jean de Valios, and Aime Agnel, Maitres Anciens de la Musique Francaise 5 (Paris: Heugel, 1975).

Ninot le Petit, *Opera omnia*, ed. Barton Hudson, CMM 870 (Neuhausen-Stuttgart: American Institute of Musicology, 1979).

Obrecht, Jacob. *J'ay pris amours*, ed. Bernhard Thomas, The Art of the Netherlanders 1470-1530 (London: London Pro Musica Edition, 1984).

Perkins, Leeman and Howard Garey, eds. *The Mellon Chansonnier* (New Haven and London: Yale University Press, 1979), 2 vols.

Picker, Martin, ed. *The Motet Books of Andrea Antico*, Monuments of Renaissance Music 8 (Chicago and London: University of Chicago Press, 1987).

Smijers, Albert, ed. *Werken van Josquin Desprez* (Amsterdam: VNM, 1921-1969).

Secondary Literature

Aldrich, Putnam, 1969: 'An Approach to the Analysis of Renaissance Music', *MR* 30, 1-21.

Allaire, Gaston, 1972: *The Theory of Hexachords, Solmization, and the Modal System* MSD 24 (American Institute of Musicology).

Antonowycz, Myroslaw, 1966: 'Zur Autorschaftsfrage der Motetten Absolve, Quaesumus, Domine und Inter Natos Mulierum', *TVNM* 20, 154-169.

_____, 1976: '"Illibata Dei Virgo: " A Melodic Self-Portrait of Josquin des Prez', *Josquin des Prez*, 545-59.

_____, 1978: 'Criteria for the Determination of Authenticity', *TVNM* 28, 51-60.

Balmer, Lucie, 1935: *Tonsystem und Kirchentöne bei Johannes Tinctoris* (Bern and Leipzig: Paul Haupt).

Bashour, Frederick, 1975: 'A Model for the Analysis of Structural Levels and Tonal Movement of Compositions of the Fifteenth Century' (PhD dissertation, Yale University).

_____, 1979: 'Towards a More Rigorous Methodology for the Analysis of the Pre-tonal Repertory', *College Music Symposium* 19, 140-53.

Beebe, Ellen S., 1976: 'Mode, Structure, and Text Expression in the Motets of Jacobus Clemens non Papa: A Study of Style in Sacred Music' (PhD dissertation, Yale University).

_____, 1983: 'Text and Mode as Generators of Musical Structure in Clemens non Papa's "Accesserunt ad Jesum"', *Studies in the History of Music: Music and Language* [no ed.] (New York: Broude Brothers), 79-94.

_____, 1991: 'Tonal Type and Octo-Modal Classification of Some Motets Ending on C, c. 1500-1555' (unpubd typescript).

Bent, Margaret, 1972: 'Musica Recta and Musica Ficta', *MD* 26, 73-100.

_____, 1984: 'Diatonic ficta', *Early Music History* 4, 1-48.

Berger, Karol, 1980a: 'Tonality and Atonality in the Prologue to Orlando di Lasso's Prophetiae Sibyllarum: Some Metholodogical Problems in Analysis of Sixteenth-century Music', *MQ* 66, 484-504.

_____, 1980b: *Theories of Chromatic and Enharmonic Music in Late Sixteenth Century Italy* (Ann Arbor: UMI).

_____, 1987: *Musica ficta: Theories of Accidental Inflections in Vocal Polyphony from Marchetto da Padova to Gioseffo Zarlino* (Cambridge: CUP).

Bergquist, Ed Peter, 1964: 'The Theoretical Writings of Pietro Aaron' (PhD dissertation, Columbia University).

_____, 1967: 'Mode and polyphony around 1500: Theory and Practice', *Music Forum* 1, 99-161.

Berry, Wallace, 1976: *Structural Functions in Music* (New York: Dover).

Besseler, Heinrich, 1950: *Bourdon und Fauxbourdon* (Leipzig: Breitkopf und Härtel).

Blackburn, Bonnie, 1987: 'On Compositional Process in the Fifteenth Century', *JAMS* 40, 210-84.

_____, Edward Lowinsky, and Clement A. Miller, 1991: *A Correspondence of Renaissance Musicians* (Oxford: Clarendon Press).

Bloxam, M. Jennifer, 1991: 'In Praise of Spurious Saints: The *Missae Floruit Egregiis* by Pipelare and La Rue', *JAMS* 44, 163-220.

Boetticher, Wolfgang, 1989: *Geschichte der Motette* (Darmstadt: Wissenschaftliche Buchgesellschaft).

Brothers, Thomas, 1991: 'Vestiges of the Isorhythmic Tradition in Mass and Motet, ca. 1450-1475', *JAMS* 44, 1-56.

Brown, Howard Mayer, 1967: 'The Transformation of the Chanson at the End of the Fifteenth Century', *IMS: Report of the Tenth Congress, Ljubljana 1967* (Kassel: Bärenreiter, 1970), 78-96.

_____, 1976: *Music in the Renaissance* (Englewood Cliffs, NJ: Prentice-Hall).

_____, 1982: 'Emulation, Competition, and Homage: Imitation and Theories of Imitation in the Renaissance', *JAMS* 35, 1-48.

_____, 1990: 'Theory and Practice in the Sixteenth Century: Preliminary Notes on Attaingnant's Modally Ordered Chansonniers', *Essays in Musicology,* ed. Lewis Lockwood and Edward Roesner (n.p.: American Musicological Society), 75-100.

_____, 1991a: 'The Mirror of Man's Salvation: Music in Devotional Life About 1500', *Renaissance Quarterly*, 744-73.

_____, 1991b: 'Notes Towards a Definition of Personal Style: Conflicting Attributions and the Six-part Motets of Josquin and Mouton', *Proceedings of the International Josquin Symposium Utrecht 1986*, ed. Willem Elders (Utrecht: VNM), 185-207.

Bujic, Bojan, 1973: 'Josquin, Leonardo, and the Scala Peccatorum', *IRASM* 4, 145-61.

Bush, Helen, 1946: 'The Recognition of Chordal Formation by Early Music Theorists', *MQ* 32, 227-43.

Caldwell, John, 1983: 'Some Aspects of Tonal Language in Music of the Fifteenth anc Sixteenth Centuries', *PRMA* 110, 1-24.

Callahan, Virginia Woods, 1976: '"Ut Phoebi radiis": The Riddle of the Text Resolved', in *Josquin des Prez*, ed. Edward Lowinsky, 560-3.

Carpenter, Patricia, 1973: 'Tonal Coherence in a Motet of Dufay', *JMT* 17, 2-64.

Census-Catalogue of Manuscript Sources of Polyphonic Music 1400-1550, compiled by the University of Illinois Musicological Archives for Renaissance Manuscript Studies, edited by Herbert Kellman and Charles Hamm, Renaissance Manuscript Studies 1, 5 vols (Neuhausen-Stuttgart: American Institute of Musicology / Hänssler-Verlag, 1979-88).

Charles, Sydney Robinson, 1983: *Josquin des Prez: A Guide to Research* (New York: Garland).

Chew, Geoffrey, 1989: 'The Perfections of Modern Music: Consecutive Fifths and Tonal Coherence in Monteverdi', *Music Analysis* 8, 247-73.

_____, 1990: 'I'm Sorry, I'll Say That Again: Interrelations between Tonal Types, and their Rhetorical Basis, in Monteverdi' (unpubd typescript).

Cohen, David, 1989: '*Contrapunctus*, Improvisation, and *Res Facta*' (unpubd typescript).

_____, 1990: '*Contrapunctus* Theory and Contratenor Function: The Syntax of the Early 15th-Century Chanson' (unpubd typescript).

Congleton, Jennie, 1981: 'The Chansons of Josquin Des Pres' (PhD dissertation, Washington University at St. Louis).

Crocker, Richard, 1962: 'Discant, Counterpoint, and Harmony', *JAMS* 15, 1-21.

_____, 1966: *A History of Musical Style* (New York).

Crocker, Richard, 1990: *New Oxford History of Music*, vol 1 (Oxford: Oxford University Press).

Cummings, Anthony, 1979: 'A Florentine Sacred Repertory from the Medici Restoration (Manuscript II.I.232 of the Biblioteca Nazional Centrale, Firenze)' (PhD dissertation, Princeton University).

_____,1981: 'Toward an Interpretation of the Sixteenth-Century Motet', *JAMS* 34, 43-59.

_____, 1990: 'The Transmission of Some Josquin Motets', *JRMA* 115, 1-32.

Dahlhaus, Carl, 1968: *Untersuchungen über die Entstehung der harmonischen Tonalität* (Kassel: Barenreiter), trans. Robert Gjerdingen, *Studies on the Origin of Harmonic Tonality* (Princeton: Princeton University Press, 1990).

_____, 1969: 'Tonsystem und Kontrapunkt um 1500', *Jahrbuch des staatlichen Instituts für Musikforschung* (Preussischer Kulturbesitz), 7-18.

_____, 1976: 'On the Treatment of Dissonance in the Motets of Josquin', *Josquin des Prez*, 334-44.

Dammann, Rolf, 1953: ' Spätformen der isorhythmischen Motette im 16. Jahrhundert', *AfMw* 10, 16-40.

Dill, Charles, 1982: 'Non-cadential Articulation of Structure in Some Motets of Josquin and Mouton', *CMc* 30, 37-56.

Drake, George Warren James, 1972: 'The First Printed Books of Motets, Petrucci's *Motetti A Numero Trentatre A* (Venice, 1502) and *Motetti de Passione, de Cruce, de Sacramento, de Beata Virgine et Huiusmode B* (Venice, 1503): A Critical Study and Complete Edition' (PhD dissertation, University of Illinois at Urbana-Champaign).

Dunning, Albert, 1970: *Die Staatsmotette 1480-1555* (Utrecht: A. Oosthoek).

Dymond, Susan, 1979: 'An Analytical Study of the Motets of Josquin des Pres' (Master's thesis, University of Exeter).

Elders, Willem, 1968: *Studien zur Symbolik in Der Musik den alten Niederländer* (Bilthoven: A.B. Creyghton).

_____, 1969: 'Das Symbol in der Musik von Josquin des Prez', *AcM* 41, 164-85.

_____, 1971: 'Zusammenhänge zwischen den motetten Ave nobilissima creatura und Huc me sydereo von Josquin des Prez', *TVNM* 22, 67-73.

_____. 1976: 'Plainchant in the Motets, Hymns, and Magnificats of Josquin des Prez', *Josquin des Prez*, 523-42.

_____, 1985: 'Josquin's Gaudeamus Mass: A Case of Number Symbolism in Worship', *Studi Musicali* 14, 221-33.

_____, 1987: 'Josquin's Absolve, quaesumus, domine: A Tribute to Obrecht?' *TVNM* 37, 14-24.

_____, 1989: 'Le problème de l'authenticitéchez Josquin et les éditions de Petrucci: Une investigation préliminaire', *FAM* 36, 108-15.

_____, 1991: *Composers of the Low Countries*, trans. Graham Dixon (Oxford: Clarendon Press).

Fallows, David, 1985: 'Performing Ensembles', *TVNM* 35.

_____, 1987: *Dufay* (London: J.M. Dent).

Feldman, Fritz, 1954: 'Untersuchungen zum Wort-Ton-Verhältnis in den Gloria-Credo Sätzen von Dufay bis Josquin', *MD* 8, 141-71.

Fellerer, Karl, 1969: 'Die Kölner Musiktheoretische Schule des 16. Jahrhunderts', *Renaissance-muziek 1400-1600 donum natalicium Rene Bernard Lenaerts*, ed. Jozef Robijns, Musicologica Lovaniensia, 1 (Leuven: Katholieke Universiteit Seminarie voor Muziekwetenschap), 121-30.

Fritzche, O.F., 1890: *Glarean, sein Leben und seine Schriften* (Frauenfeld).

Finscher, Ludwig, 1962: 'Zur Cantus-firmus Behandlung in der Psalm-Motette der Josquinzeit', *Hans Albrecht in Memoriam: Gedenkschrift mit Beiträgen von Freunden und Schülern*, ed. Wilfried Brennecke and Hans Haase (Kassel: Bärenreiter), 55-62.

_____, moderator, 1976: 'The Performance and Interpretation of Josquin's Motets', *Josquin des Prez*, ed. Edward Lowinsky (London: Oxford University Press), 645-62.

_____, 1979: 'Zum Verhältnis von Imitationstechnik und Textbehandlung im Zeitalter Josquins', *Renaissance-Studien: Helmuth Osthoff zum 80. Geburtstag*, ed. Ludwig Finscher, Frankfurter Beiträge zur Musikwissenschaft 11 (Tutzing: Hans Schneider), 57-72.

Forney, Kristine K., 1987: 'Music, Ritual, and Patronage at the Church of Our Lady, Antwerp', *Early Music History* 7, 1-57.

Freeman, Daniel E., 1992: 'On the Origins of the *Pater noster - Ave Maria* of Josquin Des Prez' (Paper read at the Annual Meeting of the American Musicological Society, Pittsburgh).

Fromson, Michele, 1988: 'Imitation and Innovation in the North-Italian Motet, 1560-1605' (PhD dissertation, University of Pennsylvania).

Fuller, Sarah, 1986:. 'On Sonority in Fourteenth-Century Polyphony: Some Preliminary Reflections', *JMT* 30, 35-70.

_____, 1987: 'Line, Contrapunctus and Structure in a Machaut Song', *MusA* 6, 37-58.

Godt, Irving, 1976: 'The Restoration of Josquin Ave Mundi Spes, Maria, and Some Observations on Restoration', *TVNM* 26, 53-83.

_____, 1977: 'Motivic Integration in Josquin's Motets', *JMT* 21, 264-92.

_____, 1980: 'Renaissance Paraphrase Technique: A Descriptive Tool', *Music Theory Spectrum* 2, 110-18.

Göllner, Theodor, 1969: *Die Mehrstimmigen Liturgischen Lesungen* (Tutzing: Hans Schneider), 2 vols.

Haar, James, 1971: 'Zarlino's Definition of Fugue and Imitation', *JAMS* 24, 226-54.

_____, 1983: 'A Sixteenth-Century Attempt at Music Criticism', *JAMS* 36, 191-209.

_____, 1986: 'A Case Study in the Use of Mode: the Capricci of Giachet Berchem' (paper read at the Conference on Medieval and Renaissance Music, London, 1986).

Haigh, A, 1957: 'Modal Harmony in the Music of Palestrina', *Essays on Music in Honor of Archibald Davison* [no ed.] (Cambridge, Mass.: Harvard University), 111-20.

Harper, John, 1991: *The Forms and Orders of Western Liturgy from the Tenth to the Eighteenth Century* (Oxford: Clarendon Press).

Haydon, Glen, 1967: 'Ave maris stella from Apt to Avignon', *Festschrift Bruno Stäblein zum 70. Geburtstag*, ed. Martin Ruhnke (Kassel: Bärenreiter), 79-91.

Hermelink, Siegfried, 1960: *Dispositiones Modorum* (Tutzing: Hans Schneider).

Horsley, Imogene, 1966a: *Fugue, History and Practice* (New York).

_____, 1966b: 'Fugue and Mode in Sixteenth-century Vocal Polyphony', *Aspects of Medieval and Renaissance Music: A Birthday Offering to Gustave Reese*, ed. Jan LaRue (New York: Norton).

Ingram, S, 1973: 'The Polyphonic Salve Regina 1425-1550' (PhD dissertation, University of North Carolina).

Isgro, Robert, 1979: 'Sixteenth-century Conception of Harmony', *College Music Symposium* 19, 7-52.

Joseph, Charles M., 1978: 'Architectural Control in Josquin's *Tu pauperum refugiam*', *College Music Symposium* 18, 139-45.

Judd, Cristle Collins, 1984: 'An Analyical Study of Selected Motets of Josquin Des Prez' (M.Mus. Special Study, King's College London).

_____, 1985: 'Some Problems of Pre-Baroque Analysis: An Examination of Josquin's Ave Maria ... Virgo Serena', *MusA* 4, 201-39.

_____, 1992a: 'Josquin des Prez: Salve regina (a5)', *Models of Analysis: Music before 1600*, ed. Mark Everist (Oxford: Basil Blackwell).

_____, 1992b: 'Modal Types and *Ut, Re, Mi* Tonalities: Tonal Coherence in Sacred Vocal Polyphony from about 1500', *JAMS* 45.

_____, 1993: Review of Dahlhaus (1968/1990) in *ML*.

Jürgens, Jürgen, 1973: Liner notes to *Marien-Motetten*, DGG Archiv 2533-110.

Just, Martin, 1965: Review of *Werken*, afl. 49, *Mf* 18, 109-10.

Kellman, Herbert, 1976: 'Josquin and the courts of the Netherlands and France: the evidence of the sources', *Josquin des Prez*, 181-216.

Kerman, Joseph, 1985: *Musicology* (London: Fontana).

Kirkendale, Warren, 1984: '*Circulatio*-Tradition, *Maria Lactans*, and Josquin as Musical Orator', *Acta Musicologica* 56, 69-92.

Kirsch, Ernst, 1937: 'Studie zum Problem des Heinrich Loriti (Glarean)', *Festschrift A. Schering*.

Kirsch, Winfried, 1979: 'Zur Funktion der Tripeltaktigen Abschnitte in den Motetten des Josquin-Zeitalters', *Renaissance-Studien*, ed. Ludwig Finscher, Frankfurter Beiträge zur Musikwissenschaft, 2 (Tutzing: Hans Schneider), 145-57.

Krantz, Steven, 1983: 'Modal Practice in the Phrygian Motets of Josquin Des Prez' (Master's thesis, University of Minnesota).

_____, 1989: 'Rhetorical and Structural Functions of Mode in Selected Motets of Josquin des Prez' (PhD dissertation, University of Minnesota), 2 vols.

Lagas, R., 1965: 'Het Magnificat IV Toni van Josquin des Prez', *TVNM* 20, 20-36.

Leichtentritt, Hugo, 1908: *Geschichte der Motette* (Wiesbaden: Breitkopf und Härtel; reprinted Hildesheim: Georg Olms, 1967).

Lenaerts, R., 1967: 'Zur Ostinato-Technik in der Kirchenmusik der Niederländer', *Festschrift Bruno Stäblein*, ed. M. Ruhnke (Kassel: Bärenreiter), 157-9.

Leech-Wilkinson, Daniel, 1984: 'Machaut's Rose, Lis and the problem of Early Music Analysis', *MusA* 3, 9-28.

Lester, Joel, 1974: 'Root Positions and Inverted Triads in Theory around 1600', *JAMS* 27, 110-18.

_____, 1977: 'Major-Minor Concepts and Modal Theory in Germany, 1592-1680', *JAMS* 30, 208-53.

_____, 1978: 'The Recognition of Major and Minor Keys in German Theory: 1680-1730', *JMT* 22, 65-103.

_____, 1989: *Between Modes and Keys: German Theory 1592-1802*, Harmonologia Series No. 3 (Stuyvesant: Pendragon Press).

Lockwood, Lewis, 1984: *Music in Renaissance Ferrara 1400-1505* (Oxford: Clarendon Press).

Loge, Eckhard, 1931: *Eine Messen- und Motettenhandschrift des Kantors Matthias Krüger aus der Musikbibliothek Herzog Albrechts von Preussen* (Kassel: Bärenreiter).

Long, Michael, 1989: 'Symbol and Ritual in Josquin's Missa Di dadi," *JAMS* 42, 38-53.

Lovell, John Harrison, 1960: 'The Masses of Josquin des Pres' (PhD dissertation, University of Michigan).

Lowinsky, Edward, 1942: *Secret Chromatic Art in the Netherlands Motet* (New York: Columbia University Press).

_____, 1962: *Tonality and Atonality in Sixteenth Century Music* (Berkeley and Los Angeles: University of California Press).

_____, ed., 1968: *The Medici Codex of 1518*, Monuments of Renaissance Music 3 (Chicago: University of Chicago Press)

_____, 1969: 'Josquin des Prez and Ascanio Sforza', *Atti del Congresso Internazionale sul Duomo di Milano*, ed. M.L. Gatti Perrer, Monografie di arte Lombarda, I monumenti (Milan: Edizioni La Rete).

_____, ed., 1976a: *Josquin des Prez* (New York and Oxford: Oxford University Press).

_____, 1976b: 'Ascanio Sforza's Life: A Key to Josquin's Biography and an Aid to the Chronology of His Works', *Josquin des Prez*, 31-75.

Maas, Chris, 1965: 'Josquin -- Agricola -- Brumel -- De La Rue: Een authenticiteitsprobleem', *TVNM* 20 (120-39).

Macey, Patrick, 1985: 'Josquin's Miserere mei Deus: Context, Structure, and Influence' (PhD dissertation, University of California at Berkeley).

_____, 1989: 'Josquin's "Little" Ave Maria: A Misplaced Motet from the Vultum tuum Cycle?' *TVNM* 39, 38-49.

_____, 1991a: 'Josquin's Misericordias Domini and Louis XI', *Early Music* 19, 163-77.

_____, 1991b: '*Celi enarrant*: An Inauthentic Psalm Motet Attributed to Josquin', *Proceedings of the International Josquin Symposium Utrecht 1986*, ed. Willem Elders (Utrecht: VNM), 25-44.

_____, 1992: 'Josquin as Classic: *Qui habitat, Memor esto verbi tui*, and Two Imitations Unmasked' (unpublished typescript).

Masterman, Margaret, 1970: 'The Nature of a Paradigm', Imre Lakatos and Alan Musgrave, eds. *Criticism and the Growth of Knowledge, Proceedings of the International Colloquium in the Philosophy of Science* 4 (Cambridge: Cambridge University Press), 59-89.

Mattfeld, Jacquelyn, 1959: 'Cantus Firmus in the Liturgical Motets of Josquin des Pres' (PhD dissertation, Yale University).

_____, 1961: 'Some Relationships between Text and Cantus Firmi in the Liturgical Motets of Josquin des Pres', *JAMS* 14, 158-83.

Meier, Bernhard, 1956: 'The Musica Reservata of Adriaan Petit Coclico and its relationship to Josquin', *MD* 10, 67-105.

_____, 1969: 'Alte und neue Tonarten. Wesen und Bedeutung', *Renaissance-muziek 1400-1600*, ed J. Robijns, Musicologica Lovaniensia 1 (Leuven: Katholieke Universiteit Seminarie voor Muziekwetenschap), 157-68.

_____, 1974: *Die Tonarten der klassischen Vokalpolyphonie* (Utrecht: Oosthek, Scheltema & Holkema), trans. Ellen Beebe, *The Modes of Classical Vocal Polyphony* (New York: Broude Brothers, 1988).

_____, 1977: 'Die Modi der Toccaten Claudio Merulos', *AfMW* 34, 180-98.

_____, 1982: 'Josquins Motette Dominus Regnavit: ein Sonderfall des Tonartwechsels', *TVNM* 32, 45-50.

_____, 1986: 'Tonart und Ausdruckshaftigkeit in Instrumentalmusik der späten Renaissance', trans. Cristle Collins Judd, 'Mode and Expressibility in Instrumental Music of the Late Renaisasnce' (paper read at the Conference on Medieval and Renaissance Music, London, 1986).

Mendel, Arthur, 1976: 'Towards Objective Criteria for Establishing Chronology and Authenticity: What Help Can the Computer Give?' *Josquin des Prez*, 297-308.

Miller, Clement, 1961: 'The *Dodecachordon*: its origin and influence on Renaissance Thought', *MD* 15, 155.

_____, 1968: 'Gaffurius's *Practica Musicae*: Origin and Contents', *MD* 22, 105.

_____,1970: 'Early Gaffuriana: New Answers to Old Questions', *MQ* 56, 367.

Milsom, John, 1982: '*Circumdederunt*: "A Favourite Cantus Firmus of Josquin's"?', *Soundings* 9, 2.

_____, 1989: 'The eloquent cantus firmus' (unpubd paper read at the RMA conference, London, April 1989).

_____, 1990: 'Huc me sydereo and Ave nobilissima creatura: Twins or Stepbrothers?' (unpubd paper read at the Conference on Medieval and Renaissance Music, London, July 1990).

Mitchell, William, 1970: 'The Prologue to Orlando di Lasso's Prophetiae Sibyllarum', *Music Forum* 2, 264-73.

Montagna, Gerald, 1987: 'Caron, Hayne, Compere: A Transmission Reassessment', *Early Music History* 7, 107-57.

Morin, E, 1979: *Essai de Stylistique Comparée: Les Variations de William Byrd et John Tomkins sur "John Come Kiss me Now"* (Montreal: Les Presses de L'Université Montreal).

Moser, Hans Joachim, 1931: *Die mehrstimmige Vertonung des Evangeliums* (Wiesbaden: Breitkopf and Härtel, Reprinted Hildesheim: Georg Olms).

Murray, Russell, 1985: 'The Influence of the Cantus Firmus on Modal Structure in the Masses of Antoine Brumel', *Theoria* 1, 61-83.

Nagle, M, 1972: 'The Structural Role of Cantus Firmus in the Motets of Jacob Obrecht' (PhD dissertation, University of Michigan).

Niemöller, Klaus Wolfgang, 1956: 'Zur Tonus-Lehre der italienischen Musiktheorie des ausgehenden Mittelalters', *Kirchenmusikalisches Jahrbuch* 40, 23-32.

Noble, Jeremy, 1976: Liner notes to 'Pro Cantiones Antiqua: Josquin Desprez.', DGG Archiv 2533 360.

_____, 1984: 'Josquin Desprez', *The New Grove High Renaissance Masters*, ed. Stanley Sadie (London: Macmillan), 1-90.

_____, 1985: 'The Function of Josquin's Motets', *TVNM* 35, 9-31.

Noblitt, Thomas, 1974: 'Die Datierung der Handschrift Mus. Ms. 3154 der Staatsbibliothek München', *Mf* 27, 36-56.

Novack, Saul, 1970: 'Fusion of Design and Tonal Order in Mass and Motet', *Music Forum* 2, 187-263.

_____, 1976: 'Tonal Tendencies in Josquin's Use of Harmony', *Josquin des Prez*, 317-333.

_____, 1977: 'The History of the Phrygian Mode in the History of Tonality', *Miscellanea Musicologica* 9, 82-127.

_____, 1983: 'The Analysis of Pre-Baroque Music', *Aspects of Schenkerian Theory*, ed. D. Beach (New Haven: Yale University Press), 113-34.

Nowacki, E., 1979: 'The Latin Psalm Motet 1500-1535', *Renaissance Studien*, ed. Ludwig Finscher, Frankfurter Beiträge zur Musikwissenschaft, 2 (Tutzing: Hans Schneider), 159-84.

_____, 1986: 'Text Declamation as a Determinant of Melodic Form in the Old Roman Eighth-Mode Tracts', *Early Music History* 6, 193-226.

Nutting, Geoffrey, 1974a: 'Between Anachronism and Obscurity: Analysis of Renaissance Music', *MR* 35, 184-216.

_____, 1974b: 'The Logic of Renaissance Harmony', *IRASM* 5, 251-63.

Obst, L.D, 1957: 'Die Psalm-Motetten des Josquin Desprez' (Dissertation, Freie Universität Berlin).

Osthoff, Helmuth, 1962/1965: *Josquin Desprez* (Tutzing: Hans Schneider), 2 vols.

Owens, Jessie Ann, 1983: 'Music and Meaning in Cipriano de Rore's Setting of "Donec gratus eram tibi"', *Studies in the History of Music* [no. ed.] (New York: Broude Brothers) 95-117.

_____, 1984: 'The Milan Partbooks: Evidence of Cipriano de Rore's Compositional Process', *JAMS* 37, 270-98.

_____, 1990: 'Mode in the Madrigals of Cipriano de Rore', *Altro Polo: Essays on Italian Music in the Cinquencento*, ed Richard Charteris (Frederick May Foundation for Italian Studies: Sydney), 1-16.

_____, 1992: 'How Josquin became Josquin', (unpubd paper presented at the conference 'Making New Classics: Canon Formation in the Renaissance', Harvard University).

Palisca, Claude, 1985: *Humanism in Italian Renaissance Musical Thought* (New Haven and London: Yale University Press).

_____, 1988: *Norton Anthology of Western Music* (New York: W.W. Norton), 121-9.

_____, 1990: 'Mode Ethos in the Renaissance', *Essays in Musicology*, ed Lewis Lockwood and Edward Roesner (n.p.: American Musicological Society), 126-39.

Patrick, Philip, 1973: 'A Computer Study of a Suspension-formation in the Masses of Josquin' (PhD dissertation, Princeton University).

Perkins, Leeman, 1973: 'Mode and Structure in the Masses of Josquin', *JAMS* 26, 189-239.

_____, 1987a: 'Modal Strategies in Okeghem's Missa Cuiusvis Toni' (unpubd typescript).

_____, 1987b: 'The Use of Modal Factors in Style-Critical Analysis of Secular Music of the Fifteenth Century' (unpubd typescript).

Perle, George, 1948: 'Integrative Devices in the Music of Machaut', *MQ* 34, 169-76.

Picker, Martin, 1976: 'Josquiniana in some manuscripts at Piacenza', *Josquin des Prez*, 247-60.

Powers, Harold S., 1974: 'The Modality of Vestiva i colli', *Studies in Renaissance and Baroque Music in Honor of Arthur Mendel*, ed. R. Marshall (Kassel: Barenreiter), 31-46.

_____, 1980a: 'Mode, III: Modal Theories and Polyphonic Music', *The New Grove Dictionary of Music and Musicians*, 12, 397-418.

_____, 1980b: 'Language Models and Musical Analysis', *Ethnomusicology* 24, 1-60.

_____, 1981: 'Tonal Types and Modal Categories in Renaissance Polyphony', *JAMS* 34, 428-70.

_____, 1982: 'Modal Representation in Polyphonic Offertories', *Early Music History* 2, 43-86.

_____, 1988: 'Cultural Schemes, Modal Systems, and Musical Repertories' (paper read at the Symposium of the IMS, Melbourne, 1988).

_____, 1989: 'Monetverdi's Model for a Multimodal Madrigal', *In Cantu et in Sermone*, ed. F. della Seta and F. Piperno (Florence: Leo S. Olschki), Italian Medieval and Renaissance Studies 2 (The University of Western Australia), 185-219.

_____, 1991: 'Is mode real? Pietro Aron, the Octenary System, and Polyphony' (unpubd typescript).

Prizer, William F., 1985: 'Music and Ceremonial in the Low Countries: Philip the Fair and the Order of the Golden Fleece', *Early Music History 5*, 113-53.

Quereau, Quentin W., 1978: 'Sixteenth-Century Parody: An Approach to Analysis', *JAMS* 31, 407-41.

Rahn, J., 1981: 'Ockeghem's Three-Section Motet Salve Regina: Problems in coordinating Pitch and Time Constructs', *Music Theory Spectrum* 3, 117-31.

Randel, Don, 1971: 'Emerging Triadic Tonality in the Fifteenth Century', *MQ* 57, 73-86.

_____, 1983: 'Dufay the Reader', *Studies in the History of Music* [no ed.] (New York: Broude Brothers), 38-78.

_____, 1990: 'Music and Poetry, History and Criticism: Reading the Fifteenth-Century Chanson', *Essays in Musicology*, ed. Lewis Lockwood and Edward Roesner (n.p.: American Musicological Society), 52-74.

Reif, J., 1986: 'Music and Grammar: Imitation and Analogy in Morales and the Spanish Humanists', *Early Music History* 6, 227-44.

Reese, Gustave and Jeremy Noble, 1980: 'Josquin Desprez', *The New Grove* 9, 713-38.

Reynolds, Christopher, 1987: 'Musical Evidence of Compositional Planning in the Renaissance: Josquin's Plus nulz regretz', *JAMS* 40, 53-81.

Rifkin, Joshua, 1991: 'Problems of Authorship in Josquin; Some Impolitic Observations, with a Postscript on Absalon, fili mi', *Proceedings of the International Josquin Symposium Utrecht 1986*, ed. Willem Elders (Utrecht: VNM).

_____, 1990: 'Motivik -- Konstruktion -- Humanismus: Zur Motette Huc me sydereo von Josquin des Prez', [publication forthcoming in a Festschrift for Ludwig Finscher] trans. 'Motivicity, Constructivism, Humanism: On Josquin's Huc me sydereo' (paper read at the Conference on Medieval and Renaissance Music, London).

Rivera, Benito, 1979: 'Harmonic Theory in Musical Treatises of the late 15th and early 16th centuries', *Music Theory Spectrum* 1, 80-95.

_____, 1987: 'The Two-Voice Framework and Its Harmonization in Arcadelt's First Book of Madrigals', *MusA* 6, 59-88.

Roig-Francoli, Miguel, 1990: 'Compositional Paradigms in Sixteenth-Century Instrumental Music: Modal and Formal Structure in the Tientos of Antonio de Cabezon' (unpubd paper read at the joint meeting of the AMS/SMT/SEM, Oakland, November 1990).

Rosen, Ida, 1961: 'The Treatment of Dissonance in the Motets of Josquin Des Prez' (PhD dissertation, Cornell University).

Ross, R., 1981: 'Toward a Theory of Tonal Coherence: The Motets of Obrecht', *MQ* 67, 143-64.

Rubsamen, Walter, 1976: 'Unifying Techniques in Selected Masses of Josquin and La Rue: A Stylistic Comparison', *Josquin des Prez*, 369-400.

Ruff, Lillian, 1959: 'The Motets of Josquin des Prez' (MA thesis, University of Nottingham).

Ruwet, N., 1966: 'Méthodes d'analyse en musicologie', Revue belge de musicologie 2, 65-90, trans. with introduction by Mark Everist, 'Methods of Analysis in Musicology', *MusA* 6 (1987), 3-36.

Salop,A., 1959: 'The Masses of Jacob Obrecht -- Structure and Style' (PhD dissertation, Indiana University).

_____, 1964: 'Jacob Obrecht and the Early Development of Harmonic Polyphony', *JAMS* 17, 288-309.

Salzer, Felix, 1962: *Structural Hearing* (New York: Dover).

_____, 1967: 'Tonality in Medieval Polyphony: Towards a History of Tonality', *Music Forum* 1, 35-98.

_____ and Carl Schachter, 1969: *Counterpoint in Composition* (New York: McGraw-Hill).

_____, 1983: 'Heinrich Schenker and Historical Research: Monteverdi's Madrigal Oime, se tanto amate', *Aspects of Schenkerian Theory*, ed. David Beach (New Haven: Yale University Press), 135-52.

Samuel, Rhian, 1978: 'Modality, Tonality and Musica Ficta in the Sixteenth-Century Chanson' (PhD dissertation, Washington University at St. Louis).

Sandresky, M., 1981: 'The Golden Section in Three Byzantine Motets of Dufay', *JMT* 25, 291-306.

Schachter, Carl, 1970: 'Landini's Treatment of Consonance and Dissonance: A Study in Fourteenth-century Counterpoint', *Music Forum* 2, 130-86.

Schering, A., 1911-1912: 'Die Notenbeispiele in Glarean's Dodekachordon (1547)', *SIMG* 13, 569-96.

Schreiber, H., 1837: *Heinrich Glarean, seine Freunden und seine Zeit* (Freiburg: Universitäts-Buchdruckerei der Gebrüder Groos).

Schulenberg, David., 1985-6: 'Modes, Prolongation, and Analysis', *Journal of Musicology* 4, 303-29.

Shenassa, Daryoosh, 1978: 'A Review of Suspension Theory by Selected Music Theorists and an examination of Suspension Ornamentation in the Masses of Josquin Des Prez' (MA thesis, The American University.).

Sherr, Richard, 1988: 'Illibata Dei virgo nutrix and Josquin's Roman Style', *JAMS* 41, 434-464.

Silbiger, Alexander, 1986: 'Tipi tonali nella musica di Frescobaldi per strumenti a tastiera', *Girolamo Frescobaldi nel IV Centenario Della Nascita*, ed. Sergio Durante and Dinko Fabris (Florence: Olschki), 301-314.

Snow, Robert, 1983: 'Toledo Cathedral MS "Reservado 23": A Lost Manuscript Rediscovered', *The Journal of Musicology* 2, 246-77.

Sparks, Edgar, 1963: *Cantus Firmus in Mass and Motet 1420-1520* (Berkeley: University of California Press).

_____, 1976: 'Problems of Authenticity in Josquin's Motets', *Josquin des Prez*, 345-59.

Stam, Edward, 1971: 'Die vierundzwanzigstimmige kanonische Psalmmotette Qui Habitat in Adiutorio Altissimi von Josquin des Prez', *TVNM* 22, 1-17.

Stern, David, 1981: 'Tonal Organization in Modal Polyphony', *Theory and Practice* 6, 5-39.

_____, 1990: 'Schenkerian Theory and the Analysis of Renaissance Music', in *Schenker Studies, ed. Hedi Siegel (Cambridge: Cambridge University Press)*, 45-59.

_____, 1991: 'The Use of Accidental Inflections and the Musical System in Josquin's Period, ca. 1480-1520' (PhD dissertation, City University of New York).

Stewart, Rebecca, 1985: 'In principio erat verbum. A Physiological and Linguistic Study of Male Vocal Types, Timbres and Techniques in the Music of Josquin des Prez', *TVNM* 35, 97-193.

Strunk, Oliver, 1950: *Source Readings in Music History* (New York: Norton).

_____, 1974: 'Some Motet-Types of the Sixteenth Century', *Essays on Music in the Western World* (New York: Norton), 108-13.

Taruskin, Richard, 1982: Liner notes to *Josquin des Prez: Motets for the Blessed Virgin* (Musical Heritage Society 4674L).

Todd, R., 1978: 'Retrograde, Inversion, Retrograde-Inversion and Related Techniques in the Masses of Obrecht', *MQ* 64, 50-78.

Toft, Robert, 1983a: 'Pitch Content and Modal Procedure in Selected Motets of Josquin des Prez: A Comparison of the Intabulations with the Vocal Sources', (PhD dissertation, King's College London).

_____, 1983b: 'Pitch Content and Modal Procedure in Josquin's *Absalon, fili mi*', *TVNM* 33, 3-27.

Treitler, Leo, 1965: 'Tone System in the Secular Works of Guillaume Dufay', *JAMS* 18, 131-69.

_____, 1966: 'Music Analysis in an Historical Context', *College Music Symposium* 6, 75-88.

_____, 1967: 'On Historical Criticism', *MQ* 53, 188-205.

Trowbridge, Lynn, 1985-6: 'Style Change in the Fifteenth-Century Chanson', *Journal of Musicology* 4, 146-70.

Trowell, Brian, 1978-9: 'Proportion in the Music of Dunstable', PRMA 105, 100-41.

Urquhart, Peter, 1982: 'Cadence, Mode, and Structure in the Motets of Josquin Desprez' (Master's thesis, Smith College).

_____, 1988: 'Canon, Partial Signatures, and "Musica Ficta" in Works by Josquin Desprez and his Contemporaries' (PhD dissertation, Harvard University).

van Benthem, Jaap, 1969: 'Zur Struktur und Authentizität der Chansons a 5 & 6 von Josquin Des Prez', TVNM 21, 170-80.

_____, 1970: 'Die Chanson *Entre Je suis* a 4 von Josquin des Prez und ihre Überlieferung', *TVNM* 22, 203-10.

_____, 1980: 'Fortuna in Focus', *TVNM* 30, 1-46.

_____, 1985: 'The Scoring of Josquin's Secular Music', *TVNM* 35, 67-96.

_____, 1987: 'A Waif, a Wedding and a Worshipped Child: Josquin's Ut Phebi radiis and the Order of the Golden Fleece', *TVNM* 37, 64-81.

_____, 1989: 'Lazarus versus Absalon: About Fiction and Fact in the Netherlands Motet', *TVNM* 39, 54-82.

_____, 1990: Unpubd response to round table 'Analysing Josquin' (Conference on Medieval and Renaissance Music, London, July 1990).

Vaccaro, J., 1975: 'Proposition d'analyse pour une polyphonie vocale du XVIe siècle', *Revue de Musicologie* 61, 35-58.

Ward, Lynn Halpern, 1986: 'The Motetti Missales Repertory Reconsidered', *JAMS* 39, 491-523.

Ware, John Marley, 1978: 'Dissonance Treatment in Sacred Vocal Polyphony in more than Five Parts up to the Death of Josquin' (PhD dissertation, Louisiana State University).

Weinpahl, R.W., 1972: 'Modality, monality, and tonality in the 16th and 17th centuries', *ML* 53, 59-73.

Williams, Isabelle, 1975: 'Manipulation of Imitative Temporal Distance in Textural Progressions of Josquin des Prez' (PhD dissertation, University of Michigan).

Wiora, Walter, 1976: 'The Structure of Wide-Spanned Melodic Lines in Early and Late Works of Josquin', *Josquin des Prez*, 309-16.

Wessely, Othmar, 1980: 'Bruck, Arnold von', *New Grove Dictionary* 3, 351-52.